VOL. 78 NO. 4

textile bulletin

APRIL • 1952

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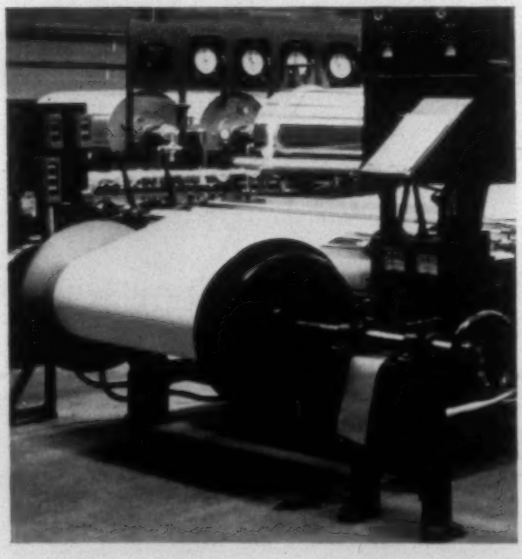
ABC

Slash your sizing costs

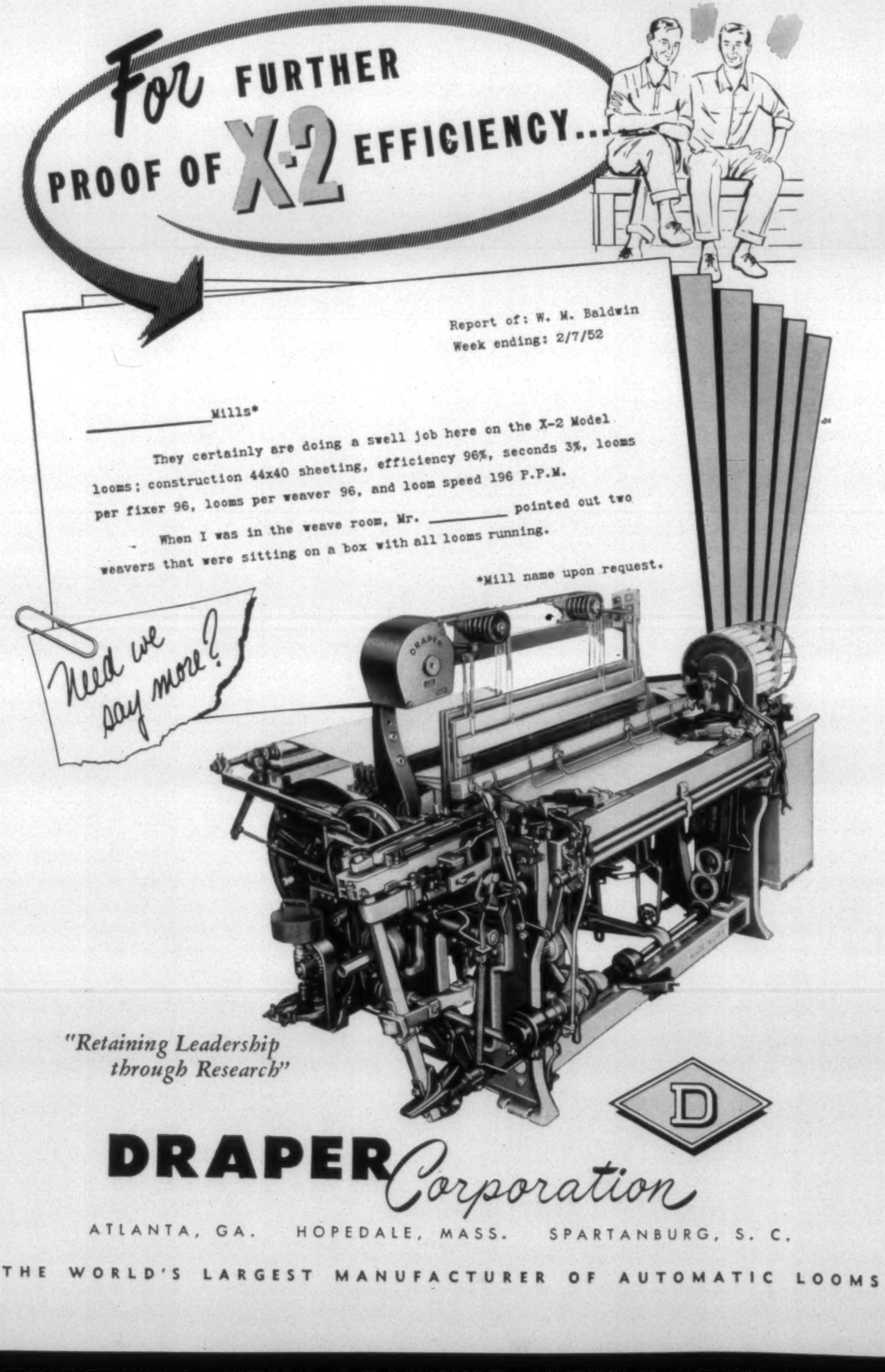
with CHEMICALLY TREATED ORR SLASHER CLOTH



The Slasher Cloth that
- Resists bacteria and steam deterioration
- Holds its width
- Dresses the yarn properly
- Starts fast
- Lasts long
- Maintains level production

It's NEW! It's DIFFERENT! It's BETTER!

More And More Southern Mills Are Changing To ORR Slasher Cloth



For FURTHER PROOF OF X-2 EFFICIENCY...

Report of: W. M. Baldwin
Week ending: 2/7/52

______________Mills*

They certainly are doing a swell job here on the X-2 Model looms; construction 44x40 sheeting, efficiency 96%, seconds 3%, looms per fixer 96, looms per weaver 96, and loom speed 196 P.P.M.

When I was in the weave room, Mr. _________ pointed out two weavers that were sitting on a box with all looms running.

*Mill name upon request.

Need we say more?

"Retaining Leadership through Research"

DRAPER *Corporation*

ATLANTA, GA. HOPEDALE, MASS. SPARTANBURG, S. C.

THE WORLD'S LARGEST MANUFACTURER OF AUTOMATIC LOOMS

COMMERCIAL FACTORS CORPORATION

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EUGENE G. LYNCH, 80 FEDERAL STREET, BOSTON 10, MASS.
T. HOLT HAYWOOD, WINSTON-SALEM, NORTH CAROLINA

Stop Oil Creep...Roll

Damage...Yarn Spoilage

...use SINCLAIR NO-DRIP

Here's a fine lubricant especially made to stay in place! When you apply Sinclair NO-DRIP to necks and yokes, it stays right there, allows rolls to turn smoothly, without drag. This provides even draft and saves wear. And, because NO-DRIP will not creep or drip, yarn and roll coverings are protected from spoilage. So, for uniformly finer yarn production, fewer roll replacements, and for lower maintenance cost, use NO-DRIP.

**SINCLAIR
TEXTILE
LUBRICANTS**

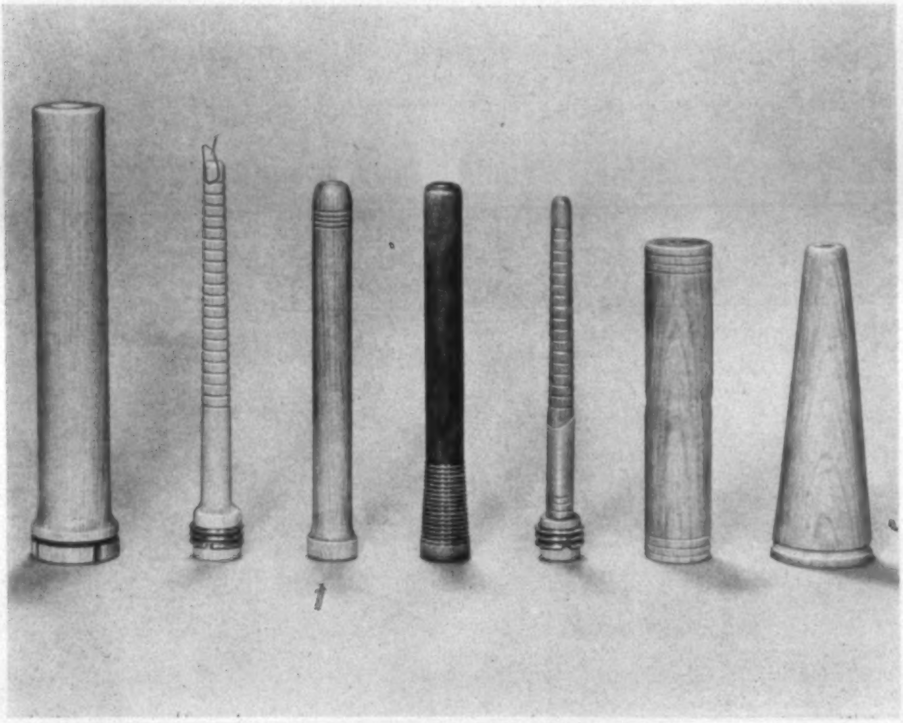
For full information or lubrication counsel write Sinclair Refining Company, 600 Fifth Avenue, New York City

When You Think of BOBBINS . . .

Quills

Warp Bobbins

Roving Bobbins



Cones

Tubes

Since 1887

. . . Think of D. S. C. . . . DANA S. COURTNEY CO., Chicopee, Mass.

WATSON & DESMOND, Exclusive Southern Representatives

Distinguished For

QUALITY **SERVICE** **COOPERATION**

Also:

Watson-Williams Shuttles; Wood, Fibre and Metal Spools; Paper Tubes and Bobbins; Dye Tubes; Climax Ball Bearing Rolls; Cleandraft Top Rolls; Nylube Bolsters; Grob Heddles and Frames; Walton Humidifiers; Protocord Spinning Bands and Tapes; Charlotte Colloid Mill; Mona Conditioning Chemicals; Shuttle Fur.

Used Machinery ***Mill Properties***

WATSON & DESMOND

C. E. WATSON P. O. Box 1954 — Phone 3-6154 — Charlotte, N. C. S. P. V. Desmond

Edgar E. Ball **J. N. Dodgen** **Phone 3-6154** **Charlotte, N. C.**	**Richard V. McPhail** **Box 1174** **Phone 8631** **Gastonia, N. C.**	**John Wyatt** **P. O. Box 701** **Phone 3-3012** **Greensboro, N. C.**	**Hugh K. Smith** **P. O. Box 472** **Phone 2-3815** **West Point, Ga.**	**Arthur J. Bahan** **Marion R. Woods** **Box 779—Phone 2-1341** **Greenville, S. C.**

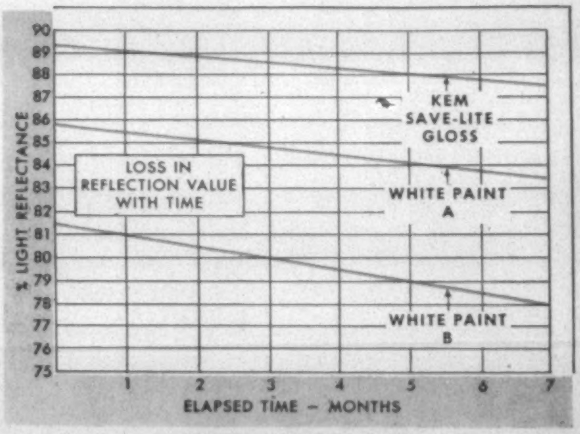
HOW "OLD" is your white paint the day it is applied?

KEM SAVE-LITE STAYS WHITER, LONGER—BECAUSE IT STARTS WHITER!

Many "white" paints are a year old—or older—*the day they are applied,* in terms of the graying, or gradual loss of light reflective value, that occurs as paint films age.

KEM SAVE-LITE Mill White Finishes *start* whiter, or "newer", and *stay* consistently whiter, year after year, than most conventional white finishes. Proof of this is shown in the comparison of light reflective values of KEM SAVE-LITE and two typical ordinary mill white finishes in the accompanying chart.

Test KEM SAVE-LITE for yourself! See the difference—in initial whiteness—in hiding power—in greater covering capacity! Call your Sherwin-Williams representative for a demonstration, or write The Sherwin-Williams Co., Cleveland 1, Ohio. (Division Offices, Charlotte, N. C. and Boston, Mass.)

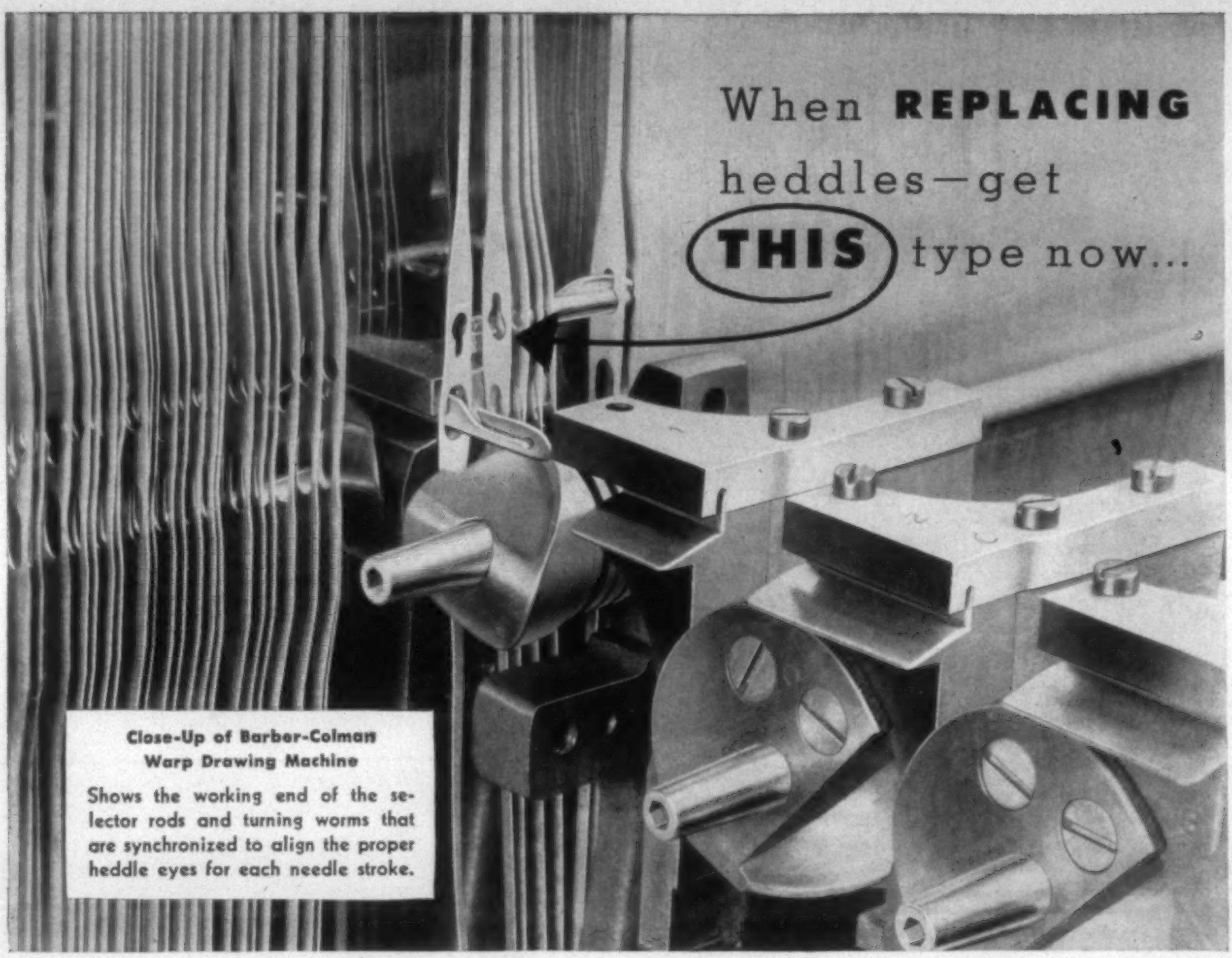


HERE IS PROOF!

Note how the whiteness, or reflective value of SAVE-LITE *starts* higher than conventional finishes when first applied, and *stays* higher throughout its life! This means longer intervals before repainting is required.

SHERWIN-WILLIAMS

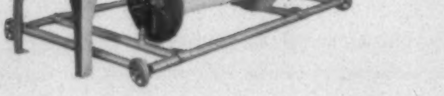
SAVE-LITE MILL WHITE • COLOR HARMONY FINISHES
MILL VILLAGE PAINTS



Close-Up of Barber-Colman Warp Drawing Machine

Shows the working end of the selector rods and turning worms that are synchronized to align the proper heddle eyes for each needle stroke.

By replacing your heddles with key-hole type NOW you will be ready for a Warp Drawing Machine LATER



The Barber-Colman Warp Drawing Machine requires equipping your looms with harness having steel heddles of the type shown above. Sometimes the cost of such heddles may amount to more than the cost of the machine. These facts should not discourage consideration of the machine, in view of the advantages of substantial cost savings in warp preparation. Since you are replacing groups of your heddles frequently and constantly as they wear out — why not replace your worn-out harness with the type that can be used on a Barber-Colman Warp Drawing Machine? Then, when you are ready for the machine, the problem of special heddles will have been solved. For details in connection with such a program, we suggest you consult your Barber-Colman representative.

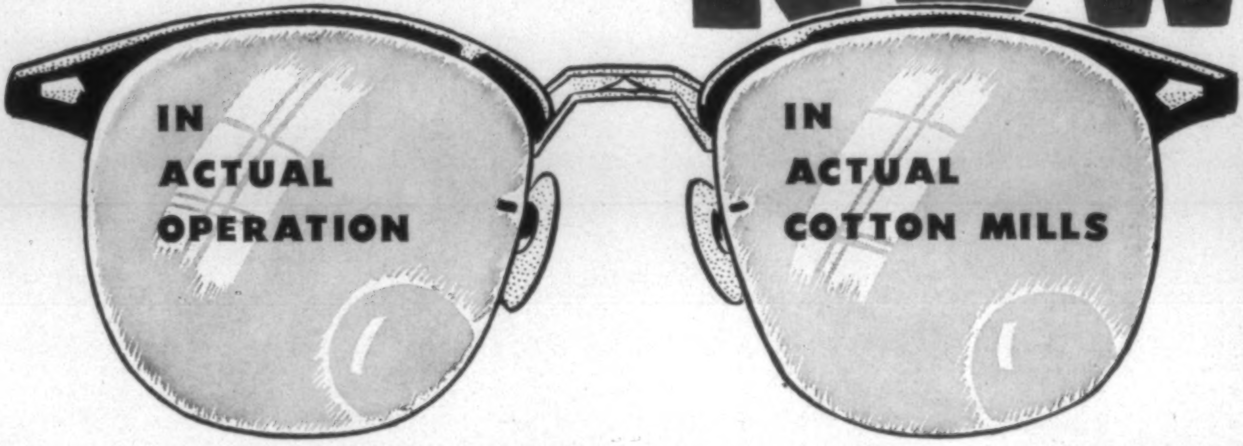
AUTOMATIC SPOOLERS • SUPER-SPEED WARPERS • WARP TYING MACHINES • DRAWING-IN MACHINES

BARBER-COLMAN COMPANY

ROCKFORD • ILLINOIS • U. S. A.

FRAMINGHAM, MASS., U. S. A. GREENVILLE, S. C., U. S. A. MANCHESTER, ENGLAND MUNICH, GERMANY

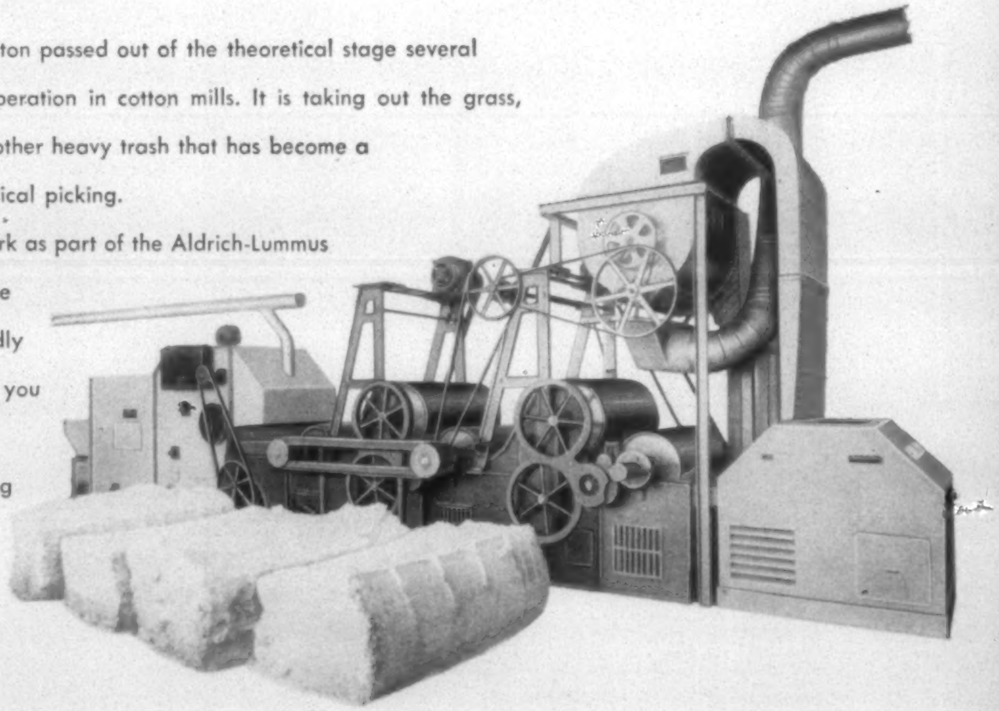
SEE IT... NOW



Super-Jet air cleaning of cotton passed out of the theoretical stage several years ago. It is in actual operation in cotton mills. It is taking out the grass, leaf stems, bark, shale and other heavy trash that has become a problem because of mechanical picking.

You can see Super-Jet at work as part of the Aldrich-Lummus cleaning system. The mills are enthusiastic. They have gladly given us permission to invite you to visit them.

You will find that this cleaning system without moving parts does a thorough job of cleaning, using gentle streams of air.



You will see for yourself how it improves the spinning value of the cotton.

Let us know when it will suit you, and we will arrange a visit to one or several of these effective installations.

Made by

LUMMUS COTTON GIN CO.
Columbus, Ga.
and
ALDRICH MACHINE WORKS
Greenwood, S. C.

Sold and Installed by

AldricH MachinE WorkS
Greenwood South Carolina

ALDRICH-LUMMUS CLEANING SYSTEM

This
Invisible Trademark
stands back of the Trademarks
of the
Finest Rugs and Carpetings

C&K
A Loom for Every Woven Fabric

Crompton & Knowles LOOM WORKS

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National Aniline Dyes

can give your new lines the plus-value of exciting eye-appeal so needed in today's markets. If you are contemplating a new fiber or blend in your new fabrics, weaves or prints, National Aniline can advise on the colors that will provide optimum properties.

For practical help on difficult dyeing or printing jobs, ask National Technical Service to provide precise matches and trouble-free formulas. And for prompt delivery from nearby warehouse stocks, always phone National Aniline *first*.

NATIONAL ANILINE DIVISION
ALLIED CHEMICAL & DYE CORPORATION

40 RECTOR STREET, NEW YORK 6, N. Y. • Boston • Providence • Philadelphia • Chicago
San Francisco • Portland, Ore. • Greensboro • Charlotte • Richmond • Atlanta
Columbus, Ga. • New Orleans • Chattanooga • Toronto

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LEATHER BELTING

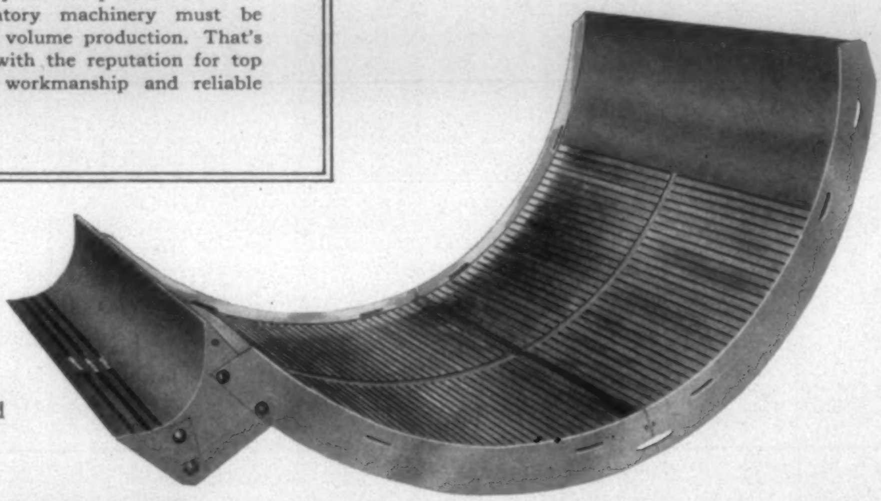
Higher Horsepower Transmission . . . Insures Maximum Machine Production!

CHARLOTTE 3-STAR Leather Belting is specifically designed to meet the power transmission problems of the textile mill. It possesses higher horsepower capacity, greater frictional qualities and will better absorb shock loads and overloads than ordinary belting. Made only from the center cuts of top quality hides . . . specially tanned, curried and constructed . . . 3-STAR Belting has proved its higher efficiency and longer life in many of America's leading textile mills. A test in *your* mill will prove that it can increase *your* unit production at lower power cost.

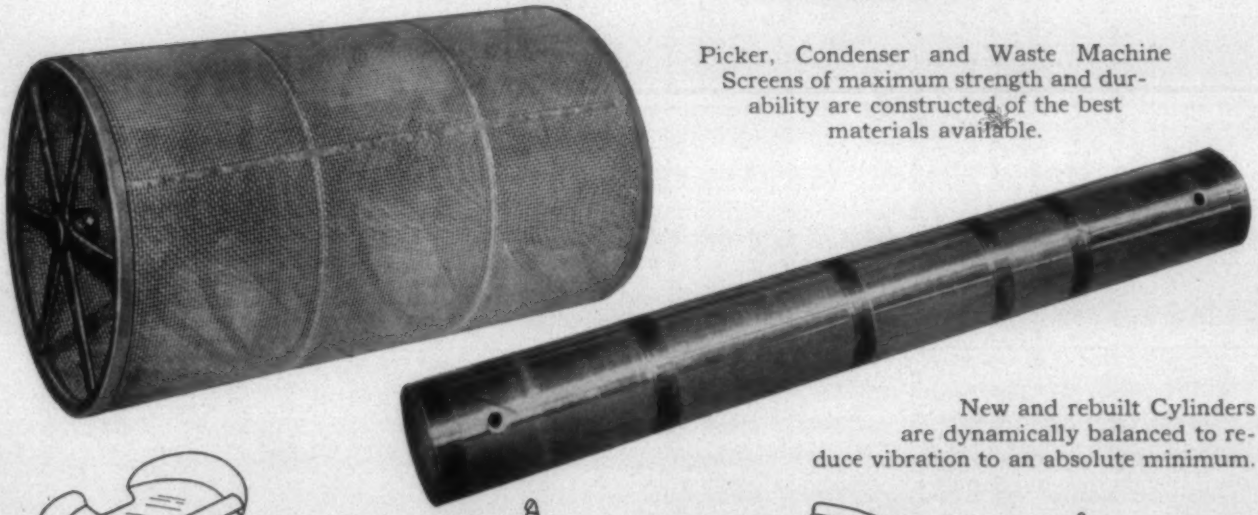
CHARLOTTE LEATHER BELTING COMPANY
Charlotte, North Carolina
SINCE 1894

MORE PRODUCTION AT LOWER COSTS with GASTONIA TEXTILE SHEET METAL PARTS

The quality and the profit of your end product starts at the beginning—where preparatory machinery must be geared for efficient, economical volume production. That's our job—a job for specialists with the reputation for top quality products, painstaking workmanship and reliable service.

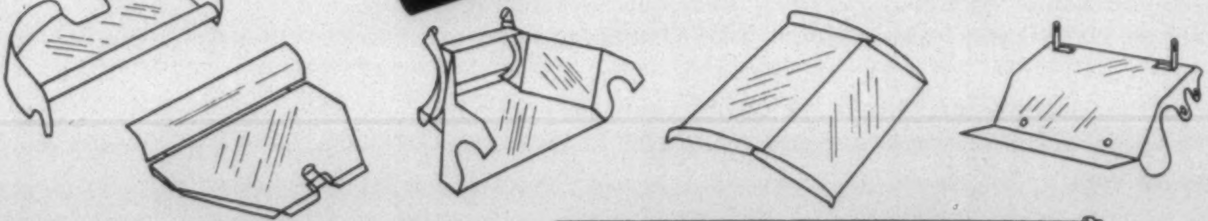


Standard type rib or perforated Card Screens are precision built on special jigs. Every screen is inspected and double checked for accuracy and tolerance.



Picker, Condenser and Waste Machine Screens of maximum strength and durability are constructed of the best materials available.

New and rebuilt Cylinders are dynamically balanced to reduce vibration to an absolute minimum.



Years of practical experience —the finest of raw materials —and precision machinery in the hands of skilled workmen go into every product.

GASTONIA TEXTILE SHEET METAL WORKS, Inc.
GASTONIA, NORTH CAROLINA
A SHEET METAL WORKS SERVING TEXTILE MILLS

First Choice!

and no wonder...

. . . The Dayco Cot's "super" fiber repellence makes it a big hit with millmen—no matter what fibers they're spinning! For whether you spin cotton, wool, blends or synthetic fibers, you'll find the Dayco Cot means fewer lap-ups, fewer ends down, cleaner yarn. And its better wearing qualities make it *outlast* any ordinary roll covering you've ever used.

Here's what *users* say: "Already outlasted the type of cot we were using, and good for years more" . . . "roll replacement is minimized" . . . "They spin perfect yarn right from the go, even on Monday morning startups!"

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See for yourself—put Dayco Cots on your frames, for the long pull ahead. Ask your salesman or: Dayton Rubber Co., Textile Div., Woodside Bldg., Greenville, S.C.

Dayton Rubber
Since 1905
TEXTILE PRODUCTS FOR
BETTER SPINNING AND WEAVING

TUFFER CYLINDER CLOTH
the finest Card Clothing Foundation on the market

A Tuffer Tension Regulator and Motor Drive as used in the illustration greatly simplify the work of clothing a roll. It does a smoother job and saves much time and money.

One of the reasons our customers get such good results from TUFFER Card Clothing is because of the unique construction of the TUFFER Cylinder Cloth.

This foundation is made of four plies of specially designed fabrics carefully woven. They are bonded together with oilproof adhesive in our special way which gives you a strong foundation, yet pliable enough to promote the proper carding action of the wires when on your card.

TUFFER Cylinder Cloth was developed and patented by Howard Bros. after many years of research. A trial will convince you that it is the finest foundation available. Our complete line of foundations for card clothing includes wool face, felt face and rubber faces and specialties.

HOWARD BROS. MFG. CO. WORCESTER 8, MASSACHUSETTS

Southern Plants: Atlanta, Georgia and Gastonia, N. C. **Branch:** Philadelphia, Pa.

Direct Representation in Canada

A-4

. . . IT PAYS TO SPECIFY TUFFER CARD CLOTHING

Rayon Reports

Prepared Monthly by American Viscose Corporation, New York, N. Y.
April, 1952

Stepped-up Staple Processing made possible by New Rover and Spinner

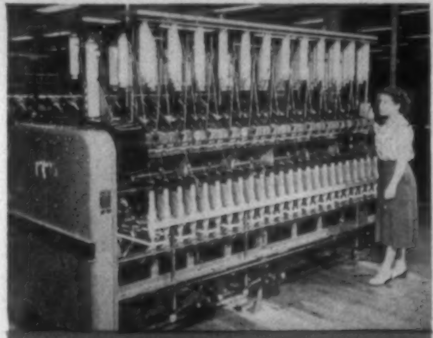
Added facilities for processing staple yarns from tow are provided by a 48-spindle FS-4 Rover and a 48-spindle SS-4 Spinner now installed at Avisco's Textile Research Department.

These new Saco-Lowell machines will process all the man-made fibers and all natural fibers except cotton in any length up to seven inches. Their use will be confined to the newer or modified worsted system, which involves fewer operations than the standard Bradford system.

FS-4 Rover

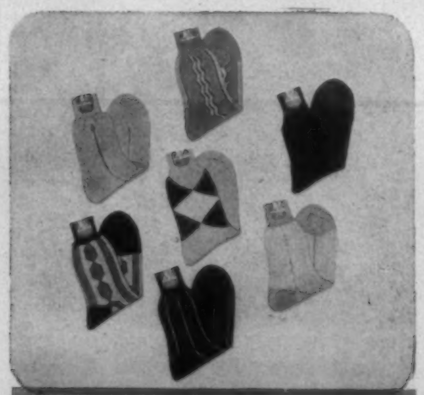
The new Rover receives an untwisted sliver, drafts it, inserts minimum twist, and delivers it on a roving bobbin ready for spinning. The new Spinner accepts the roving from the FS-4 Rover and spins it into yarn.

The Rover and Spinner can be used with the Pacific Converter and a new Pin Drafter, also installed at Marcus Hook, to process yarn with fewer intermediate steps.


SS-4 Spinner

This expansion of the worsted division is but one segment of an overall broadening of the experimental work of Avisco's Textile Research Department. New developments in nearly every kind of textile machinery have been installed to round out the department's service to the industry.

Filatex yarns spark trend to ankle-length hose


College Socks are among the many types of hosiery which utilize Avisco Filatex yarns in the elastic top. Made by Whisnant Hosiery Mills, Inc., Hickory, North Carolina.

The growing popularity of men's ankle-length hosiery is one result of the qualities of Avisco Filatex yarns. These elastic yarns are ideal for the elastic-tops that make socks self-supporting. Durable, lightweight with excellent laundering qualities, they are being successfully used for every type of sock in every price range. Development work to further broaden the application of these yarns is under way at the Textile Research Department.

MAKE USE OF *Avisco*® 4-PLY SERVICE

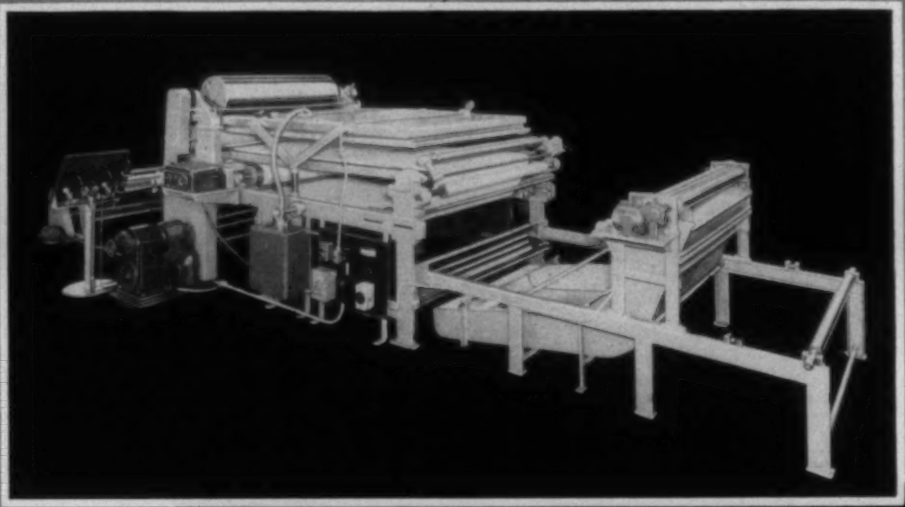
To encourage continued improvement in rayon fabrics, American Viscose Corporation conducts research and offers technical service in these fields:

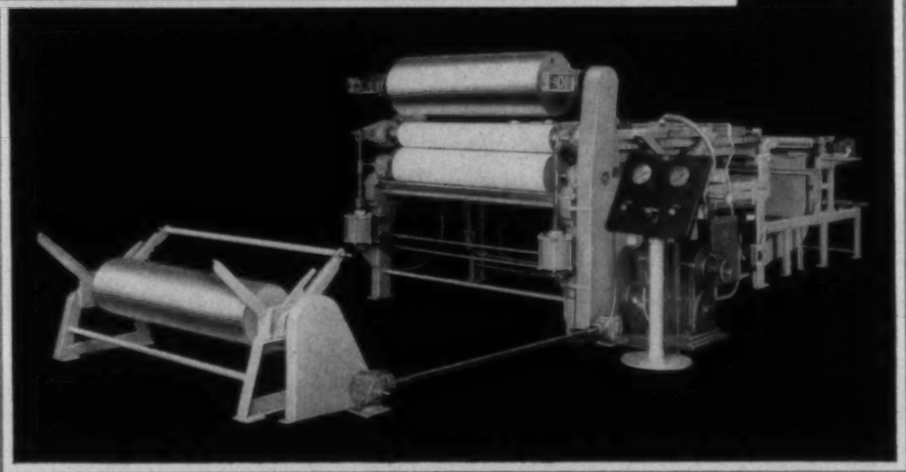
1. **FIBER RESEARCH**
2. **FABRIC DESIGN**
3. **FABRIC PRODUCTION**
4. **FABRIC FINISHING**

AMERICAN VISCOSE CORPORATION

World's largest producer of man-made fibers

Sales Offices: 350 Fifth Avenue, New York 1, N. Y.; Charlotte, N. C.; Cleveland, Ohio; Philadelphia, Pa.; Providence, R. I.

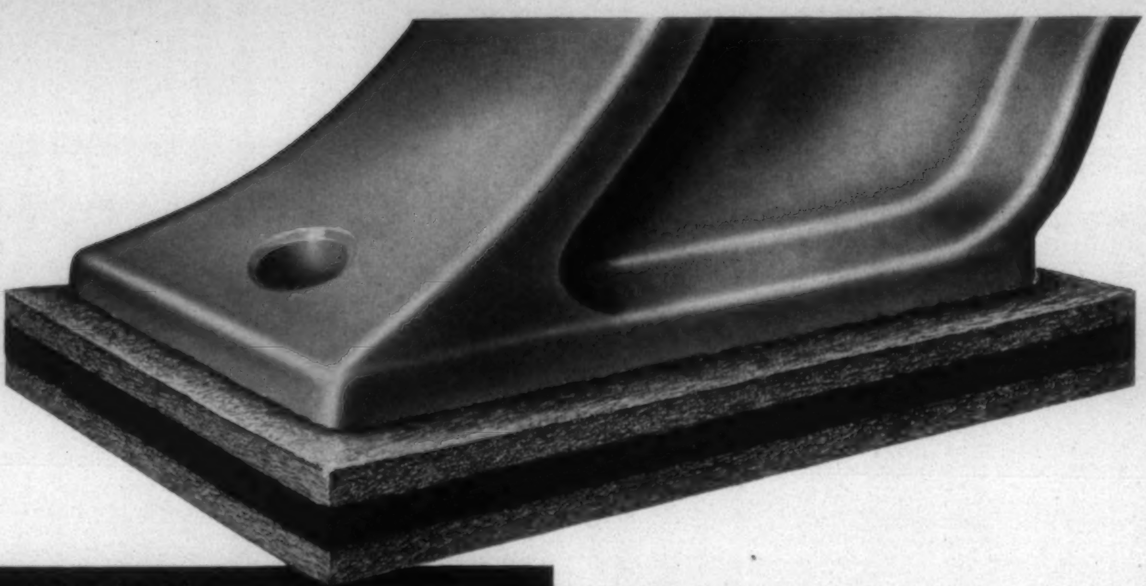




The Perkins Vinyl Embossing Machine produces quality roll embossing. This unit is engineered and built to meet exactly the requirements of the plastic converting industry, economically, in fine detail.

And . . . the Perkins Vinyl Embossing Machine is readily adaptable to use your existing rolls.

B. F. PERKINS & SON, Inc.
HOLYOKE, MASS., U.S.A.
LARGEST MANUFACTURERS OF CALENDER ROLLS IN THE WORLD



Here's another of the many dramatic examples of where UNISORB—the "no-bolt, no-lag screw, no-floor drilling" Machine Mounting — has paid off handsomely in flooring that is as good today as the day it was laid. These are Nathsmith Combers mounted on UNISORB in the nationally known mills of Clark Thread Company, Georgia.

Do Away with DESTRUCTIVE Floor Drilling

Mount Combers, Looms and ALL Your Machines on UNISORB®

No bolts . . . no lag screws . . . and no more old-fashioned, costly floor drilling. That's what you get when you switch to the modern machine-mounting . . . UNISORB.

What's more, you'll save installation time. A special cement, which we supply, securely bonds the UNISORB pads to machine feet and floor with a holding strength of 5000 lbs. per square foot *minimum*. And, if you so desire, we pre-cut and pre-shape the UNISORB pads to fit the machine feet ready for immediate use.

In addition to these important savings, you'll do well to remember that UNISORB eliminates 60-85% of all transmitted machine vibration and noise. This means longer life for machines, for floors, for buildings . . . and a substantial lowering of the noise factor for improved working conditions and morale.

LOOK FOR THE RED CENTER AND UNISORB BRAND MARK

THE FELTERS COMPANY

210-G SOUTH STREET, BOSTON 11, MASSACHUSETTS
Offices: New York, Philadelphia, Chicago, Detroit, St. Louis
Sales Representative: San Francisco
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Southwest Representative: Textile Supply Co., Dallas, Texas
Mills: Johnson City, New York; Millbury, Mass.; Jackson, Mich.; New York City

GET THE FACTS . . . ALL THE FACTS . . . ON UNISORB®—TODAY!

1 Fact to Remember

WHETHER SUPPLY IS LONG OR SHORT...

A contract for textile chemicals can never be better than the plant capacity and raw materials control behind it! With basic, growing alkali and elemental Phosphorus production, Westvaco can give you the quality and service you need to keep production flowing smoothly. The record of recent years is ample evidence of how our plants perform.

When you order any of the chemicals listed here from Westvaco, you'll get "delivery as promised" from nearby plants at South Charleston, W. Va. or Carteret, N. J.—plus the friendly interest of men who can give you a prompt, concise answer on your alkali, phosphate or other chemicals needs. Contract or spot, it pays to call Westvaco first.

Westvaco® CHEMICALS
TRADE MARK

is the Only integrated producer of all these textile chemicals

CAUSTIC SODA

Liquid 50% Standard and Rayon Grades
Liquid 70-73% Standard Grade, Flake and Solid

CAUSTIC POTASH

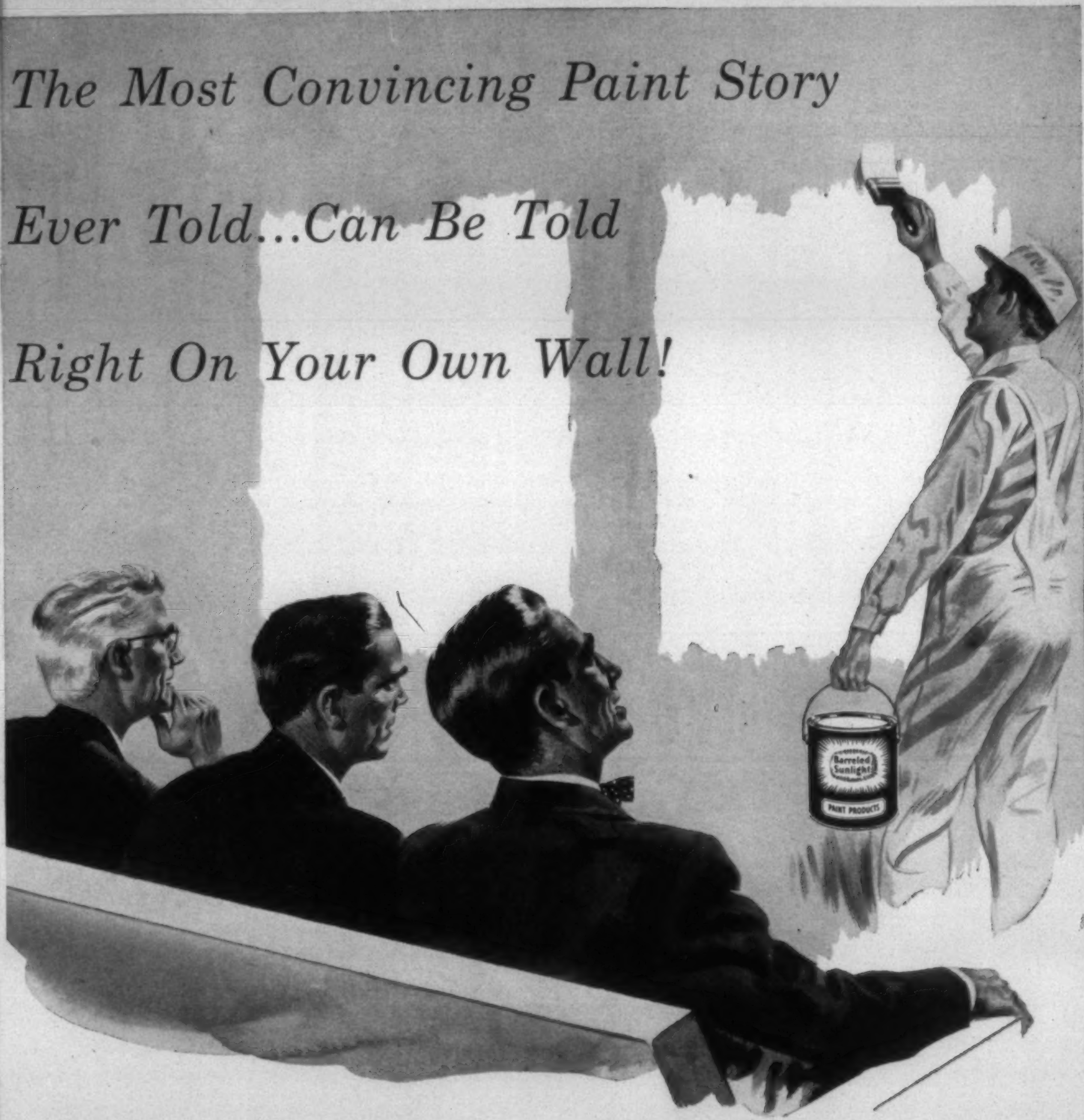
Liquid 45%, Flake and Solid

Acid Sodium Pyrophosphate
Monosodium Phosphate
Tetrasodium Pyrophosphate
Tetrapotassium Pyrophosphate
Dipotassium Phosphate
Disodium Phosphate
Sodium Tripolyphosphate
Tripotassium Phosphate
Monopotassium Phosphate
Tetrasodium Pyrophosphate Crystals

Other Chemicals: Barium Peroxide, Blanc Fixe (Barium Sulphate), Carbon Bisulfide, Carbon Tetrachloride, Fire Extinguisher Fluid, Hydrogen Peroxide, Magnesium Chloride, Sodium Sulfide.

WESTVACO CHEMICAL DIVISION
FOOD MACHINERY AND CHEMICAL CORPORATION
161 EAST 42nd STREET, NEW YORK 17, N. Y.
CHICAGO, ILL. • CLEVELAND, OHIO • CINCINNATI, OHIO • CHARLOTTE, N. C.
ST. LOUIS, MO. • POCATELLO, IDAHO • LOS ANGELES, CALIF. • NEWARK, CALIF.

The Most Convincing Paint Story Ever Told...Can Be Told Right On Your Own Wall!



This paint story is something you should hear. It's something you owe to yourself to SEE. For it can save you real money in maintenance painting costs — *and give you a better paint job to boot!*

It's the Barreled Sunlight "economy-through-quality" story — *told right on your own wall* by means of the famous Barreled Sunlight "on-the-wall" test.

Alert maintenance and operating men who have tried this eye-opening test are now saving real money and getting better, longer-lasting paint jobs. Your Barreled Sunlight representative will be glad to arrange and supervise one right in your plant and at your convenience.

If you're interested in saving money . . . in learning how to figure true painting costs . . . let him tell you *and show you* the Barreled Sunlight story. We know you'll find it the most interesting and convincing paint story ever told. Write, and he'll call.

BARRELED SUNLIGHT PAINT COMPANY, 5-D Dudley St., Providence 1, R. I.

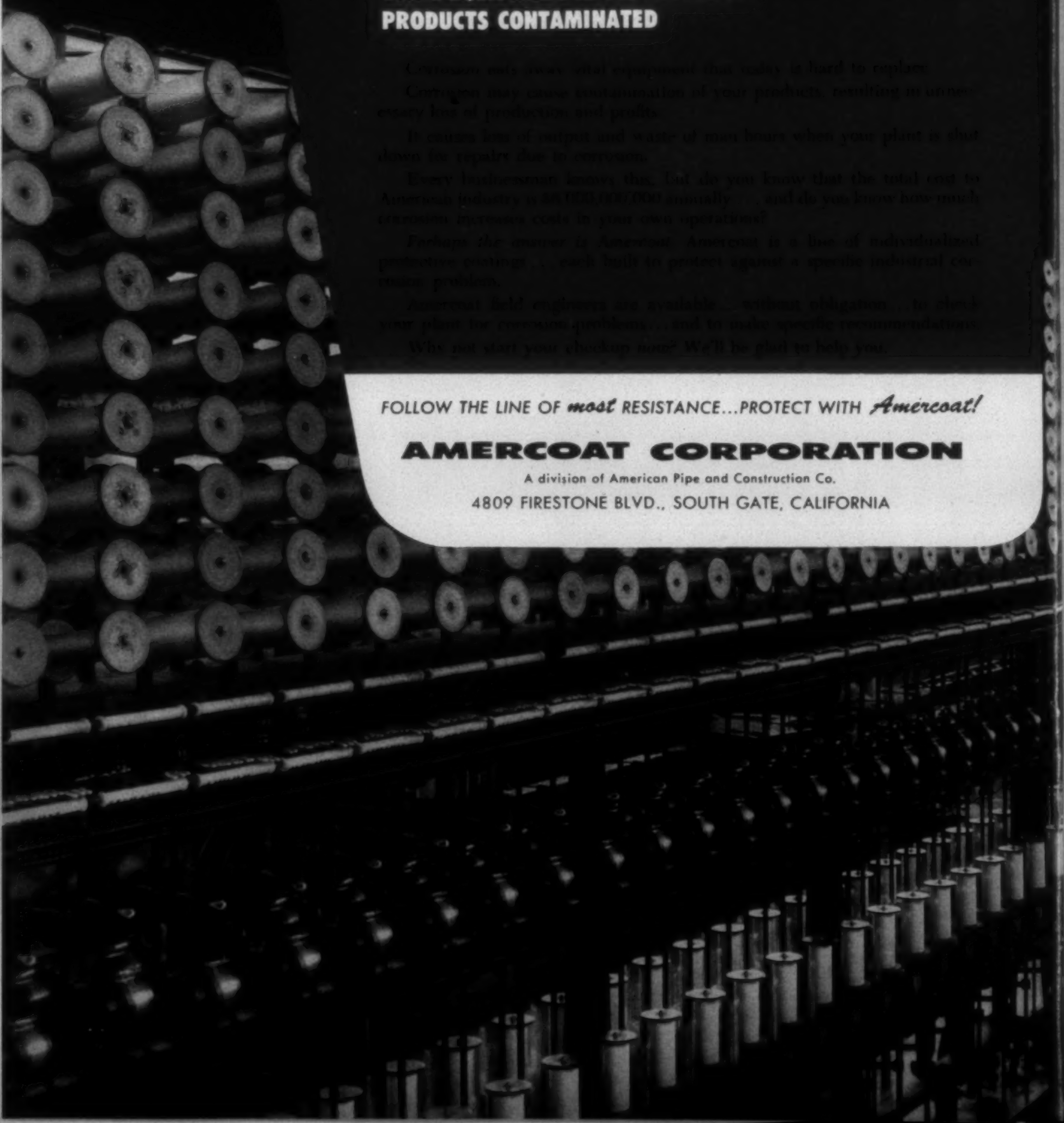
Barreled Sunlight® *Paints*

In whitest white or clean, clear, wanted colors, there's a Barreled Sunlight Paint for every job

IT ALWAYS COSTS MORE NOT TO PAINT!

For over half a century the symbol of quality and dependability among paint buyers for leading industrial, institutional and commercial buildings

CORROSION costs the Textile Industry millions each year...



VITAL EQUIPMENT IS DESTROYED...
PRODUCTS CONTAMINATED

Corrosion eats away vital equipment that today is hard to replace.

Corrosion may cause contamination of your products, resulting in unnecessary loss of production and profits.

It causes loss of output and waste of man hours when your plant is shut down for repairs due to corrosion.

Every businessman knows this. But do you know that the total cost to American industry is $6,000,000,000 annually . . . and do you know how much corrosion increases costs in your own operations?

Perhaps the answer is Amercoat. Amercoat is a line of individualized protective coatings . . . each built to protect against a specific industrial corrosion problem.

Amercoat field engineers are available . . . without obligation . . . to check your plant for corrosion problems . . . and to make specific recommendations.

Why not start your checkup now? We'll be glad to help you.

FOLLOW THE LINE OF *most* RESISTANCE...PROTECT WITH *Amercoat!*

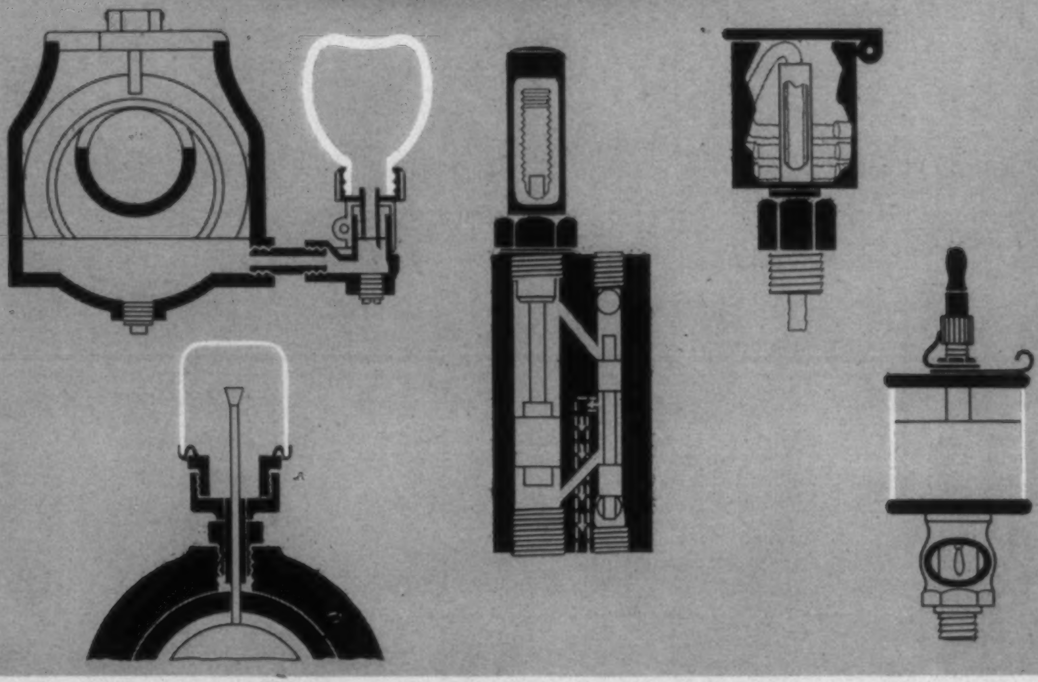
AMERCOAT CORPORATION

A division of American Pipe and Construction Co.
4809 FIRESTONE BLVD., SOUTH GATE, CALIFORNIA

NUMBER 1 OF A SERIES

How Gulf Periodic Consultation Service helps textile mills cut lubrication and maintenance costs

APPLICATION METHODS THROUGHOUT THE MILL SURVEYED, IMPROVEMENTS RECOMMENDED



A logical source of information and help on any problem that involves lubricants or lubrication is a trained Gulf Lubrication Engineer. You'll find he does more than simply recommend the proper oils and greases for your equipment. He offers help on every phase of lubrication, on every type of equipment.

When he initially surveys your machinery, for example, he keeps an experienced eye on the suitability of various applicators and systems which supply the oils and greases. The chances are good that some of this equipment in your mill could and should be improved.

For example, are your card bearings hand oiled? If so, the installation of bottle oilers here might produce a savings in oil consumption and maintenance costs. Have you considered the advisability of installing constant-level oilers on your comb boxes? Are you wondering about the practicability of installing mechanical force feed lubricators on twister rings? A Gulf Lubrication Engineer can advise you on problems like these.

The need for this type of survey increases with the age of the equipment. This is just one phase of Gulf Periodic Consultation Service. For additional information on this advanced plan, call in a Gulf Lubrication Engineer today or send the coupon below.

GULF SERVES INDUSTRY

Gulf Oil Corporation · Gulf Refining Company
719 Gulf Building, Pittsburgh 30, Pa.

Please send me, without obligation, a copy of the booklet "Gulf Periodic Consultation Service."

Name...

Company...

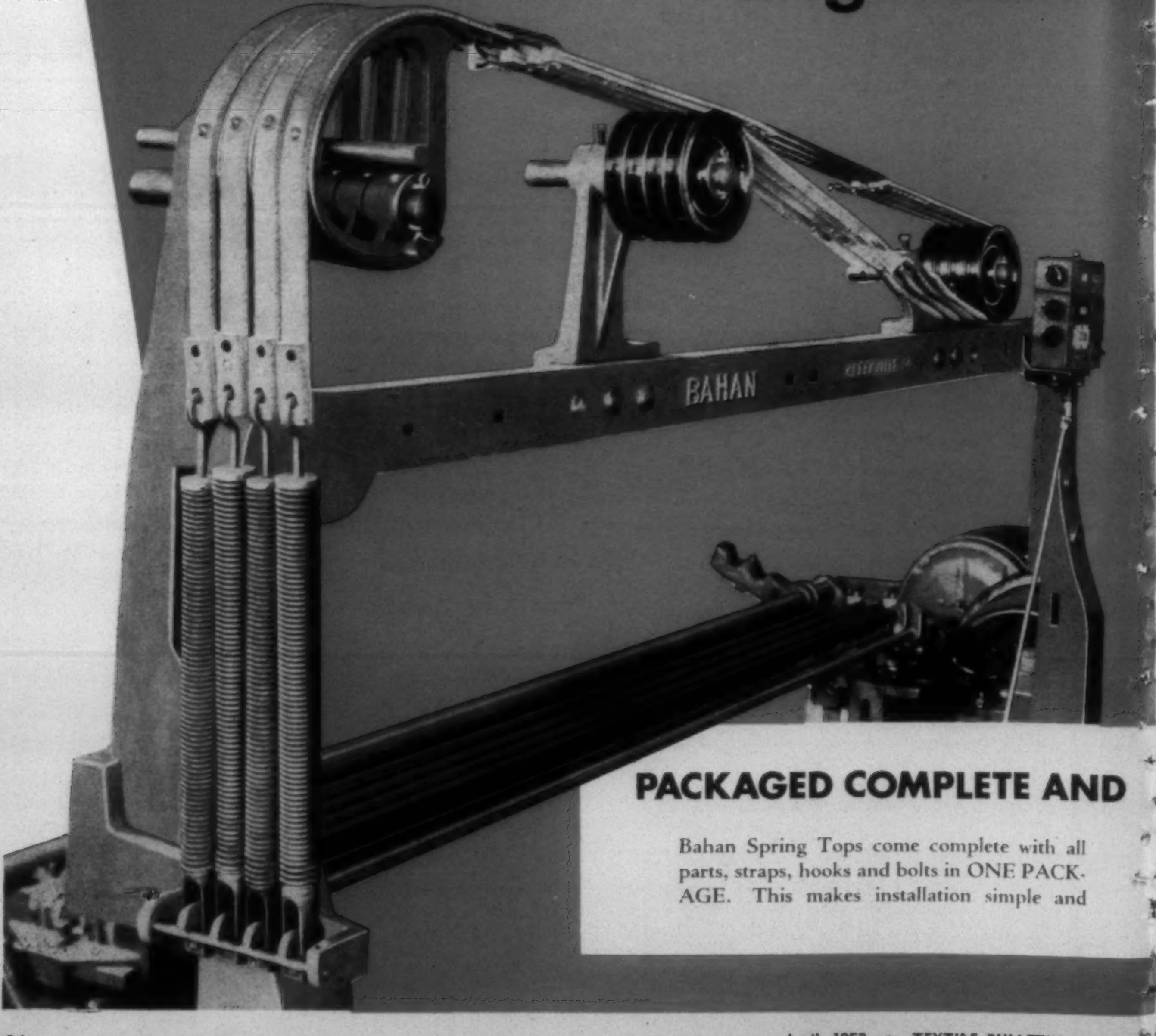
Title...

Address...

Get Profit-winning

BAHAN SP

Engineered



PACKAGED COMPLETE AND

Bahan Spring Tops come complete with all parts, straps, hooks and bolts in ONE PACKAGE. This makes installation simple and

Production with

PRING TOPS

for Top Efficiency

Bahan's heavy-duty spring top assemblies are built for rugged service . . . every part from studs to strapping is "blue ribbon" quality plus! That's why so many mills specify BTM Spring Tops every time they order. All studs are made of hardened steel. Supplied with plastic or wood sheaves as specified. All compensating sheaves have long-lasting bronze bushings. Only the finest grades of spring wire and strapping are supplied with this assembly. BAHAN SPRING TOPS are made especially for all E, K and X model looms. Available in any number of harness up to six. Order Bahan Blue Ribbon Spring Tops today!

BAHAN TEXTILE MACHINERY CO., INC.
GREENVILLE, SOUTH CAROLINA

FREE SHUTTLE VISE

This handy gadget for loomfixers makes the removal of shuttle eye and spring screws easy. Saves damage to shuttle. Get yours absolutely free! Simply write your name, address, and the name of your mill on a postcard and mail to BAHAN, Dept. B-5, Box 2325, Greenville, S. C.

READY TO INSTALL . . . .

easy. No time is lost, and all parts fit perfectly. Photo shows layout of parts supplied, all in a single package, ready to install.

Be sure you're getting maximum lap resistance when you buy

One way to be perfectly sure that any cover has the lap resistance you need is to try it on your work. Before you do this, however, you should know about a laboratory test that accurately predicts the kind of performance you'll probably get.

Research men at Armstrong worked out this test to measure the relative lap resistance of various roll covers. It's a simple test that shows in minutes what normally would take months to learn in a mill. Although it's fast, mill experience has proved its remarkable accuracy.

Here's how this test works. First, the test cot is put on a frame section from which scavenger roll and clearer board have been removed. The frame is then speeded up to many times normal.

Next, the technician breaks an end and checks with his stop watch how long the cover lets the end run free. The longer the end runs free, clearly, the better chance it has in the mill of dropping to the scavenger roll. It is obvious, too, that the longer a cover lets the end run free, the better the lap resistance of that particular cot.

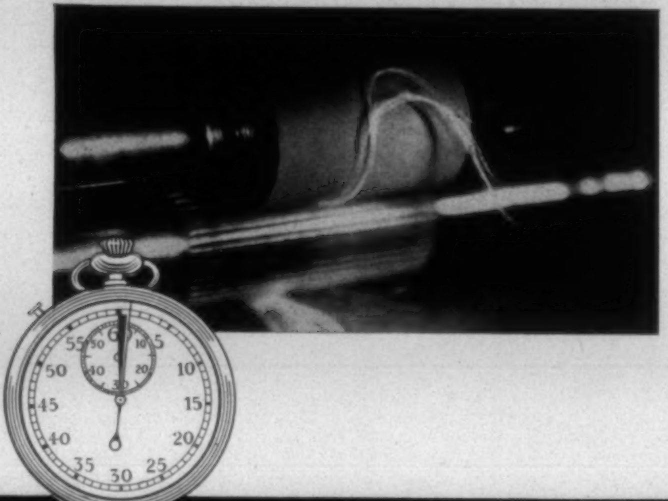
In thousands of such tests against the stop watch, Armstrong's Accotex® Covers consistently prove that they have more lap resistance than any other cover tested. They have proved their outstanding lap resistance also in actual service, as mill after mill can testify.

There is a complete line of these lap-resistant covers, each made with the patented Armstrong "electrolyte" formula. Whether you spin cotton, wool, synthetics, or blends, your Armstrong representative can suggest the right Accotex Cover for your work.

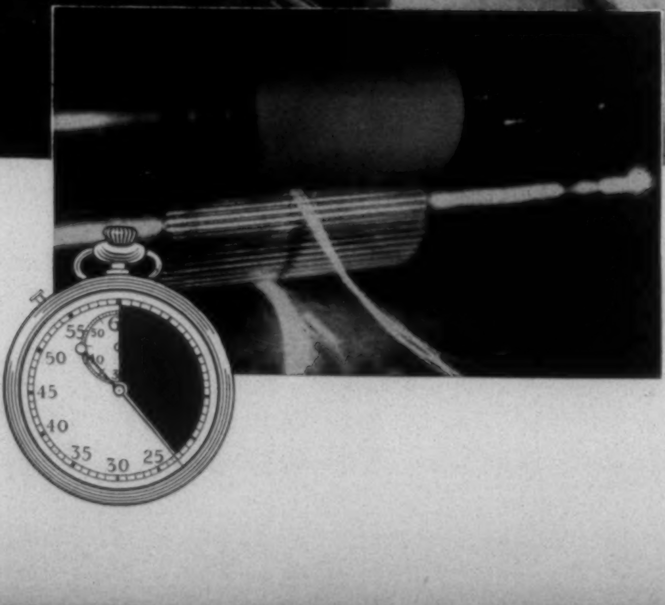
Call him today or write Armstrong Cork Co., Textile Products Department, 8204 Arch St., Lancaster, Pa. Available for export.

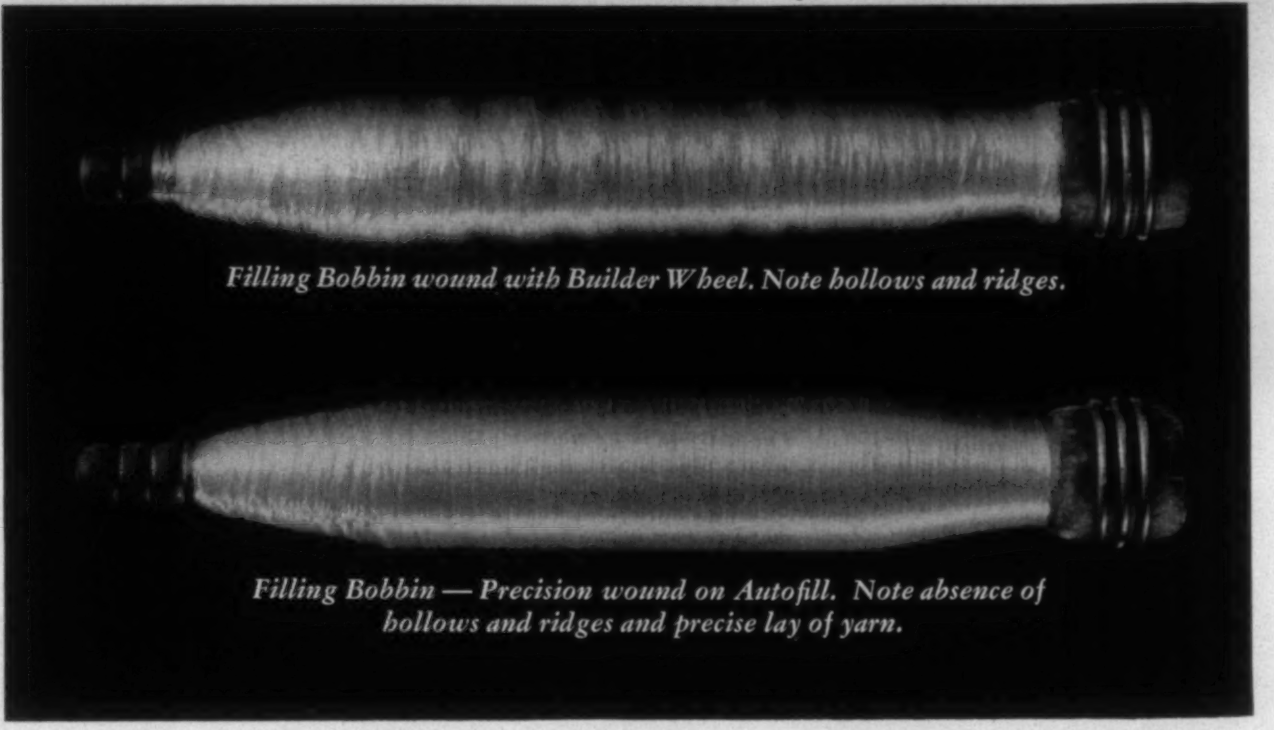
ARMSTRONG'S ACCOTEX COTS

This cot laps: Natural, microscopic moisture layers on fiber and cot each contain electric charges. When pressed together, the attraction between the two moisture layers has the effect of adhering fibers to cot, causing broken ends to lap up quickly.



This cot resists lapping: Certain electrolytes put in patented Accotex Covers neutralize electric charges in moisture layer on the cot. This destroys the adhesive effect of the two moisture layers and lets broken ends drop down onto the scavenger roll.



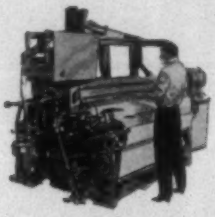


Filling Bobbin wound with Builder Wheel. Note hollows and ridges.

Filling Bobbin — Precision wound on Autofill. Note absence of hollows and ridges and precise lay of yarn.

The Foster-Muschamp Autofill Bobbin Will Save You Money

. . . AT THE LOOM

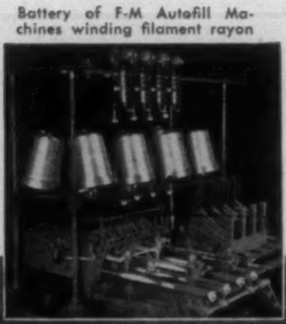


Particularly if You're Weaving Fine Denier Yarns

Winding filament rayon from parallel packages on the F-M Autofill

●

Battery of F-M Autofill Machines winding filament rayon



You can't afford to take chances *at the loom,* because "value added by manufacture" is approaching the peak at that point.

You can greatly improve the efficiency of your looms, economy in winding and the quality of your fabrics, by winding your filament filling yarns on the Foster-Muschamp Autofill — completely automatic. This machine uses gears, instead of a builder wheel, to control the lay of the yarn on the bobbin. It produces a bobbin which is exceptionally free of broken filaments, ridges and hollows. The Autofill bobbin delivers with precision in the loom, because it is a precision wound product. Results — better weaving at less cost — more production — fewer rejects.

You want these benefits no matter what you're weaving and can get them with the Autofill. However, they're particularly important if you're weaving fine denier yarns, such as 30 denier nylon. In such cases, because your materials cost is high, losses due to damage become astronomical.

Get all the facts regarding Foster-Muschamp Autofill — the completely automatic precision filling winder. Send for bulletin M-1 to-day.

FOSTER MACHINE COMPANY

Westfield, Mass., U. S. A.
Southern Office — Johnston Bldg., Charlotte, N. C.

PROGRESS REPORT **#1**

The "Toms River Story"

In the heart of the New Jersey midlands, on what had been 1200 unbroken acres of virgin pine forest until the Spring of 1949 when clearing crews moved in with axe, saw and bulldozer, a new and vast adjunct to the nation's chemical industry is rapidly taking shape . . . the most modern plant for production and technical service of vat dyestuffs in the world.

The Toms River Project is entirely Ciba conceived, designed, engineered and owned. It is being constructed, equipped and staffed by Ciba. Upon completion within the year it will be operated exclusively by Ciba.

These are the facts, but not the whole story. For beyond the tons of blueprints . . . the millions of man hours, in skill and labor . . . and the ingenious enterprise that will bring the new Ciba plant into being close on schedule . . . Ciba's management sincerely hopes that users of dyestuffs . . . and their customers in turn . . . will find in these vast new resources for vat dyes products and technical counsel a major extension of the services they seek within the Dyestuff Industry.

And to the surrounding communities of the Toms River area it will be our endeavor to make Ciba an increasingly staunch friend and welcome neighbor.

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Consider
NEOLAN*
Dyes for
WOOL
because . . .

1. **NEOLAN DYES** produce outstanding results on men's wear and ladies' dress goods.

2. **NEOLAN DYES** save time and labor . . . are particularly adaptable for and applicable to carbonized, unneutralized materials.

3. **NEOLAN DYES** produce excellent unions on wool nylon blends.

Color cards and full details for dyers on request.

**Reg. U. S. Pat. Off.*

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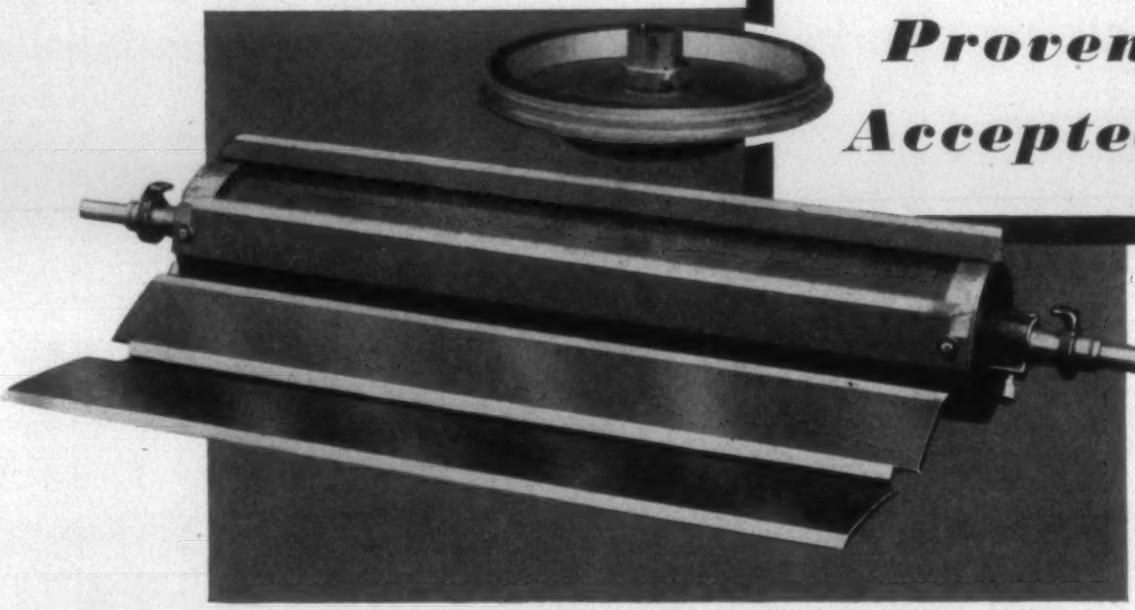
Proven!
Accepted!



THE GOSSETT IMPROVED CARD FANCY

Eliminates Lumps and Flakes When Carding Synthetics

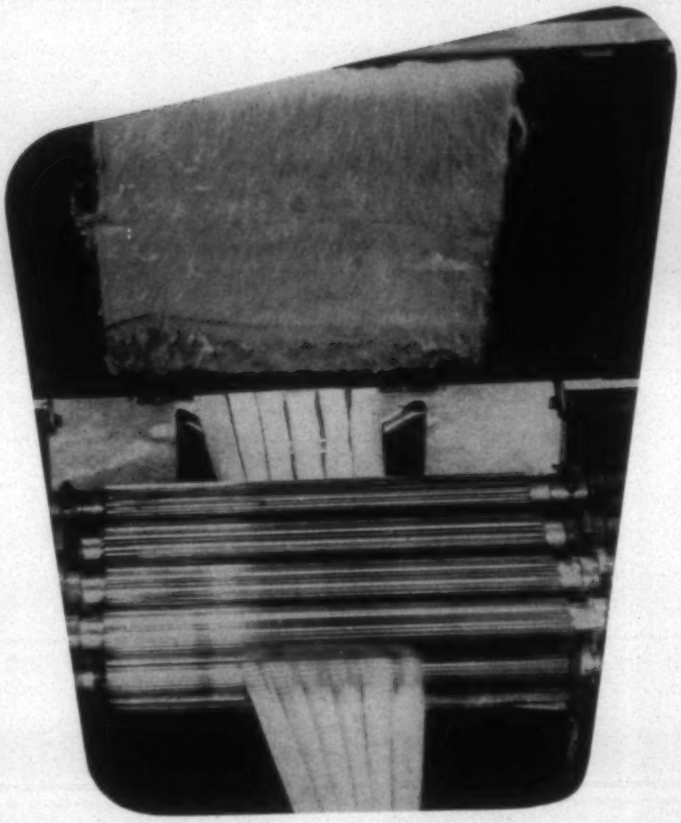
It is precision built . . . . . machined to your specifications and tolerances by GOSSETT technicians. The extra long spring steel wire fillets are guaranteed to fluff all synthetic fibers from the card cylinder thus enabling the doffer to pick them off evenly. Further, the GOSSETT Card Fancy fluffs the synthetic fibers so well that the doffer will pull off and make as good a sliver as you have ever seen.

When you install the improved GOSSETT Card Fancy there will be no more excess loading on the cylinder. Write at once for full particulars and estimated cost.

B. W. GOSSETT, President
E. C. MASON, Sales Manager
D. W. SMITH, N. C.-Va. Representative

GOSSETT MACHINE WORKS, INC.
GASTONIA, NORTH CAROLINA

22 Ideal
Drawing Deliveries
Replace 57
Old Style Deliveries
. . . and produce
Better Yarn



Ideal High Speed
Ball Bearing
Drawing Equipment*

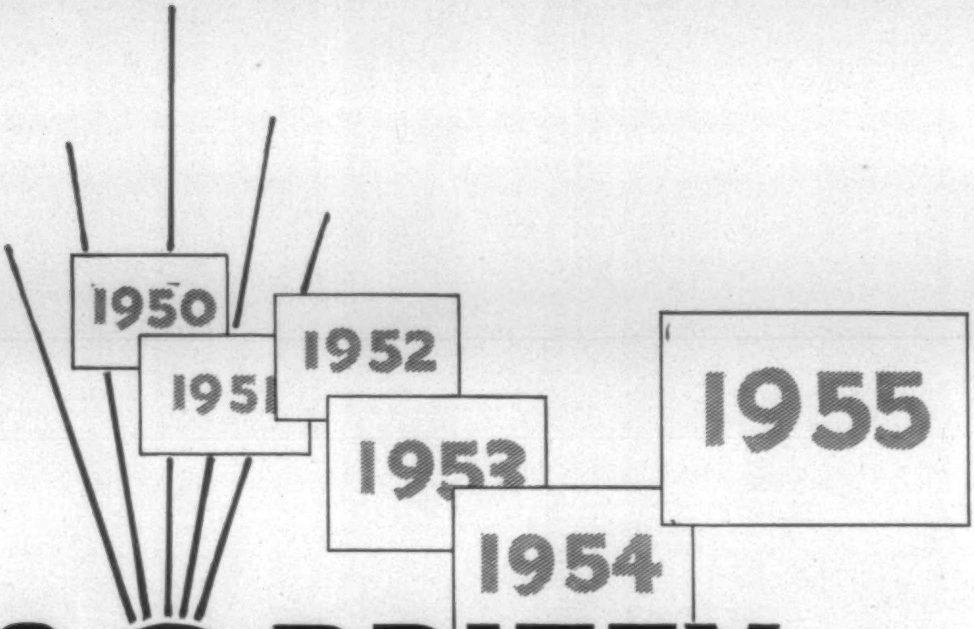
Long Shoals Cotton Mills at Lincolnton, N. C., ordered 42 Ideal High Speed Ball Bearing Drawing Deliveries to replace their 57 old style units. After the first 22 had been installed they cancelled the balance of the order.

"Our 22 Ideal deliveries are producing as much drawing as we formerly got from 57 old style units," says Mr. Columbus Johnson, Cardroom Overseer, "and are giving us 4% to 6% greater breaking strength and almost perfect evenness. Our Ideal Drawing Equipment has not only made single process drawing possible and better than our former 2 process drawing but has solved a pressing floor space problem and saved one man's time on each shift."

The Long Shoals Cotton Mills spin 20's to 50's cotton yarns, but Ideal High Speed Drawing Equipment is equally efficient on any count cottons and on synthetics. Let us show you how you can save on equipment, labor, and floor space with Ideal High Speed Ball Bearing Drawing Equipment.

Ideal Industries, Inc.
Bessemer City, N. C.

*Patented



SORBITEX

the finishing agent absolutely stable to light and time

SORBITEX-finished materials are completely stable and will not discolor or develop an odor regardless of the length of storage.

It is readily soluble in warm water, forming faintly opalescent solutions which are resistant to hard water, salts, acids or alkalis. As a softener in the rinse bath 1% to 3% SORBITEX should be used based on the weight of the goods. When used in the quetsch, about 8 to 12 pounds of SORBITEX per 50 gallons of finishing bath will usually be sufficient.

SORBITEX is generally recommended as a softener in combination with weighting agents for use in finishing cotton and rayon knit goods.

Write for a sample of SORBITEX and complete information for its use in your finishing processes.

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Warwick Chemical Company, makers of the World's No. 1 Water Repellents, Norane and Impregnole, announce an outstanding development in fabric finishing . . . offering new convenience and efficiency for mills and converters . . . and increased sales advantages for manufacturers and retailers.

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a new
series of
versatile
fabric finishing
resins

completely new hydrophobic resins (*not* mixtures of water repellents and resins) which impart

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SPOT AND STAIN RESISTANCE ● SHRINK RESISTANCE

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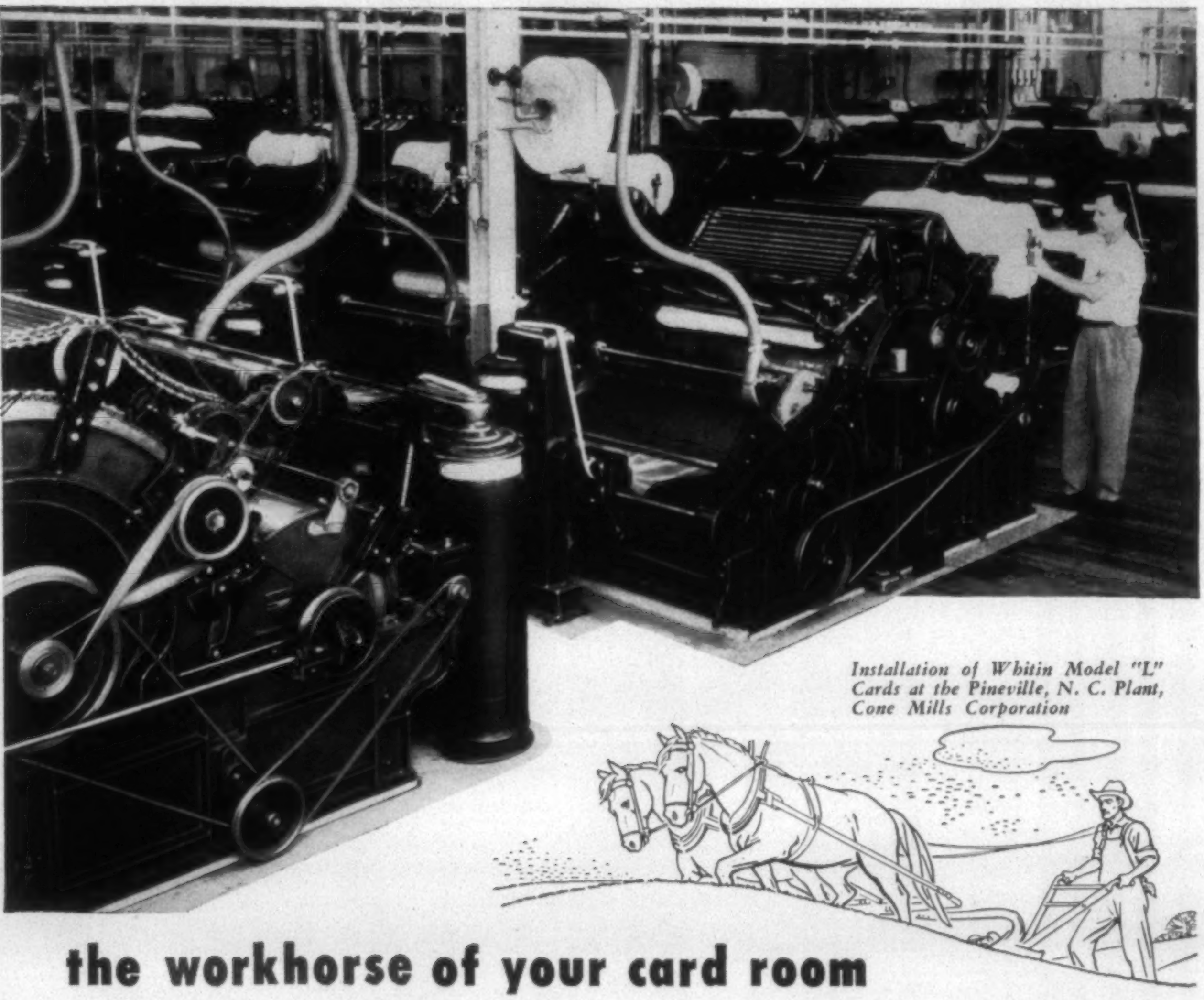
The WHITIN Model "L" Card . .



Installation of Whitin Model "L" Cards at the Pineville, N. C. Plant, Cone Mills Corporation

the workhorse of your card room

You can depend on Whitin Model "L" Cards to give you years of trouble-free, efficient operation. They're built to "take it." Day in and day out, they continue to deliver peak production and better quality with extremely low maintenance costs. Truly the Model "L" can be called the "workhorse of your card room."

The newly developed *steel top flats,* which are now standard equipment on the Model "L", give greater rigidity, closer and better holding of settings, reduction in variation and more uniform sliver.

Outstanding among the many special features which contribute to more profitable, all-around operation are:

- **Structural improvements in the framework, cylinder bearing pedestals, and arches insure that all the settings can be easily made and accurately held for long periods of time.**
- **Cut gearing for quiet operation.**
- **Oilite bearings in many locations for more efficient lubrication.**
- **Improved feed plate and feed roll weighting arrangement.**
- **Restyled surfaces and contours for easier cleaning and adjusting.**

If conditions in your card room indicate that new cards are needed, it will pay you to investigate the performance of the Whitin Model "L" Card.

Write today for our illustrated folder giving complete details and technical data.

Whitin MACHINE WORKS

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They'll work better for you under heavy pressure

ALL-WELDED and leak proof

DISHED HEAD for Safety

Troubled with leaky bolts in the stay rods of your slasher cylinders? Want to increase the drying capacity of your two—and three—cylinder slashers?

Then replace your old style cylinders with new, dished head, welded steel cylinders. The all-welded construction of WPF&M new-type cylinders does away with bolts in the stay rings and stay rods through the heads. It eliminates over 200 possible leaks in the old-style seven foot cylinder and more than 150 possible leaks in the five foot cylinder.

Drying capacity is increased because these new cylinders allow steam pressure to be stepped up to 22 PSI instead of the old 12 PSI.

And you'll benefit from these advantages in safety with these new all-welded cylinders. Available in five foot and seven foot diameter, stainless steel or copper cover.

Let us give you an estimate to replace your present equipment.

WPF&M WARP PREPARATION MACHINERY

STANDARD 2 AND 3 CYLINDER SLASHERS
CYL-AIR SLASHERS
MULTI-CAN SLASHERS
WPF&M HI-SPEED 4 CYLINDER SLASHERS
CALLAWAY SAMPLE SLASHER
AIR-DRI SLASHERS

SLASHER MODERNIZATION EQUIPMENT

HI-SPEED HEAD ENDS WITH STRETCH CONTROL
STANDARD WPF&M HEAD ENDS
MULTI-MOTOR DRIVES AND CONTROLS
TEMPERATURE, SPEED AND TENSION CONTROL DEVICES
HI-SPEED SIZE BOXES
MODEL 50 SIZE BOXES
STANDARD SIZE BOXES
SIZE KETTLES AND EQUIPMENT

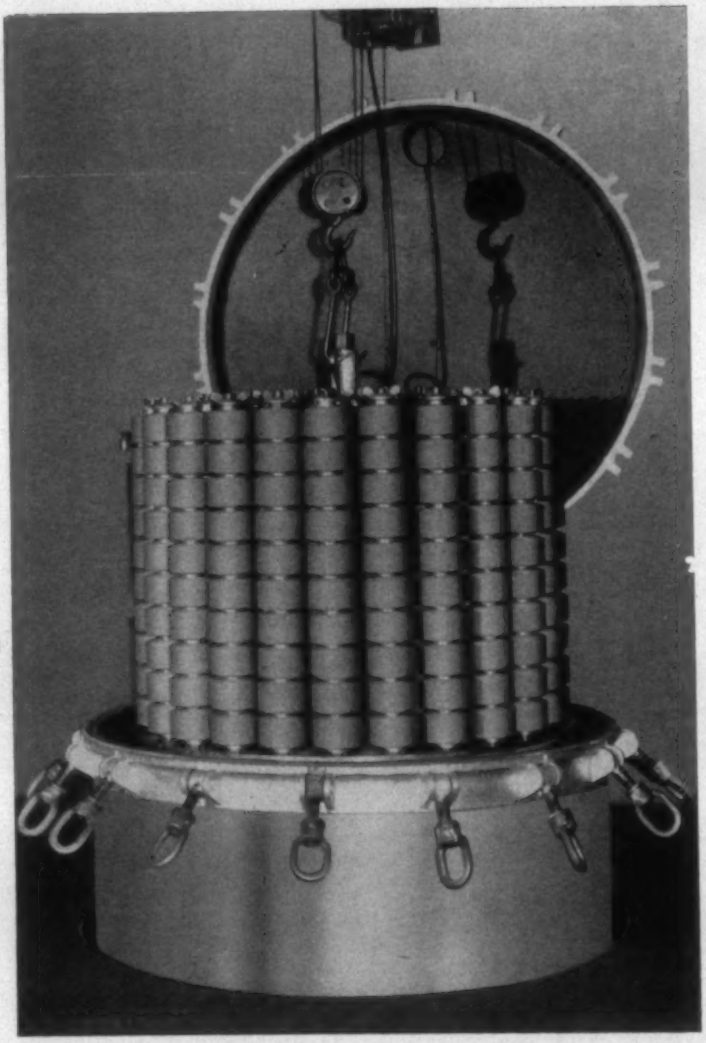
WPF&M Co.

WEST POINT
FOUNDRY & MACHINE CO.
WEST POINT, GEORGIA

Still The Most Dependable Equipment

FOR REDUCING DYEING COSTS AND LABOR

GASTON COUNTY'S COMBINATION EXTRACTOR-DRYER FITS THE REQUIREMENT OF ANY DYE HOUSE



Here's the outstanding combination extractor-dryer—with speed and efficiency proved by many years of satisfactory mill use.

Mills using this equipment report the extracting and drying of package-dyed yarn in periods of one and one-half to two hours. Drying time varies with the temperature used, density of packages, count of yarn and types of color.

Dye houses of any capacity benefit from the quick-drying, space and labor-saving features of the Gaston County combination extractor-dryer. For small production, one machine does the entire job—for larger production it may be used for extracting only, in combination with open port dryers. Let us show you how this machine can save money for you, as it has for other leading dyers.

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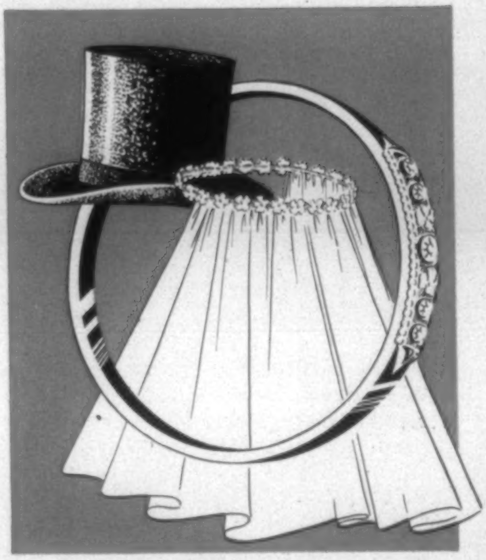
GASTON COUNTY DYEING MACHINE CO.

PIONEERS IN AUTOMATICALLY CONTROLLED DYEING MACHINES

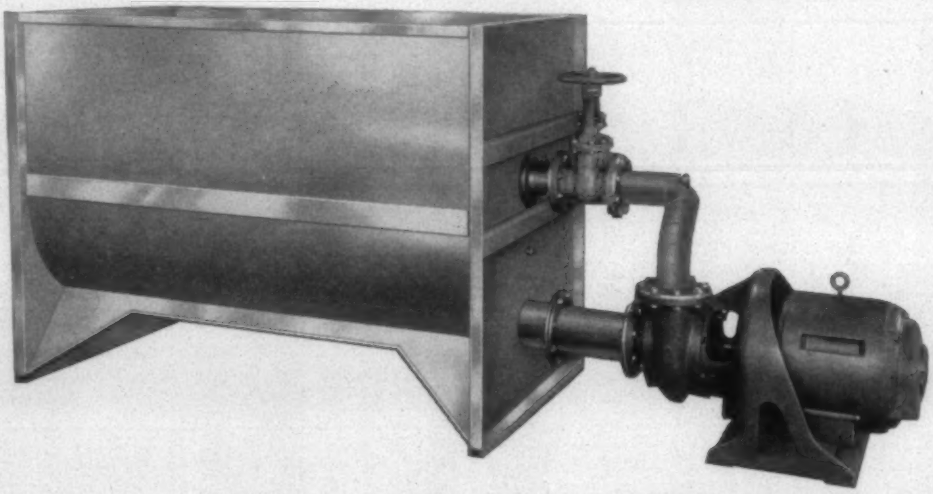
STANLEY, NORTH CAROLINA

The Perfect Marriage . . .



TRICOT and

BURLINGTON'S NEW PRESSURE BLEACH, BOIL-OFF AND DYE MACHINE

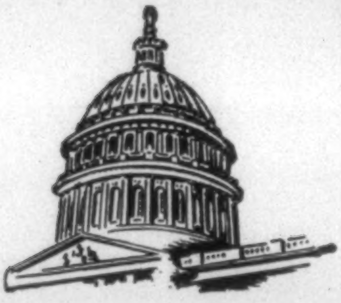


The Glamour Fabric and the Magic Machine!

At last tricot has found its perfect mate, Burlington's new pressure bleach, boil-off and dye machine! Here is a machine that will efficiently and thoroughly clean, boil, wash, bleach and dye all types of tricot at a great reduction in cost. It will speed up your production to a rate heretofore unknown in the handling of tricot.

Capacity 4,000 yards or more at one operation. This machine circulates solution through material at a constant rate. All temperatures and pressure remain under control at all times, giving full protection to cloth being processed. Although this is a new machine, it has been tried and tested and is now being installed in several leading dye plants.

Burlington **ENGINEERING COMPANY, INC.**
TELEPHONE 6-4478, BURLINGTON, N.C. **GRAHAM, N.C.**



WATCHING WASHINGTON

[Exclusive and Timely News from the Nation's Capital]

Truman's labor allies, led by Murray, are demonstrating that they are the strongest force in this Administration. Truman is making the utmost in concessions to them. Utterly unlearned in economics and industrial practices himself, he is conceding their demands without challenge. With retirement of Stabilizer Wilson, the labor group is in full control of both wage and price control machinery.

Wilson retired just ahead of being forced out as Truman indicated he would give Murray all he asked for in the steel wage dispute. Truman made clear he would not sanction higher price ceilings to absorb the increase. Wilson saw this move as an intent to absorb profits and dividends, and throw companies into bankruptcy. He believed it would go down the whole range of industry.

The Wage Stabilization Board, as a puppet of the unions, is charting a course aimed at raising wages without price increases. It is running a close parallel to nationalization of industry in England. The board is scarcely a thin disguise for the unions sitting in judgment on their own demands. Wage stabilization does not enter into the matter.

W.S.B. is following a course that points to setting up the union shop, and nailing down price and manpower controls, as a permanent policy. It was created as an instrument in the refusal of the unions to go along with Stabilizer Wilson at the outset, and has now become an agency for forcing any and all demands of union leaders on industrial managements. Its mission now is to find a way to give the unions whatever they want.

The steel wage, as well as other disputes, is being used as a means to partisan gain. The same thing has come to be true of price controls. Truman believes high wages are popular in an election year, but price increases are not. For this reason, the policy is to jack up wages, but hold down prices at the expense of corporate solvency.

What Congress will do about extending the price control law is in extreme doubt. Extension for one year is in the works, but some members of the House and Senate see little need of retention unless to hold in check the inflation that has arisen in a half dozen rounds of wage increases.

Truman has perfected plans for the Army to seize any plant engaged in arms production that becomes locked in a strike. This will apply to all of industry, with direction to the Army to put into effect the full wage increases granted by W.S.B.

The idea of seizure of plants originated with Murray and the C.I.O., and was intended to forestall resort to an injunction under the Taft-Hartley Law. Murray pointed out that a display of government force on behalf of the unions is needed now to tighten political controls over union members, and to attempt to whip them into line for the November voting.

One of the last tasks that was being performed by McGrath before his summary ouster was to work up a legal basis for plant seizure. The legal basis

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†others . . .
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- penetration
- good dye affinity
- improved sewing properties

AMERICAN Cyanamid COMPANY

INDUSTRIAL CHEMICALS DIVISION
30 Rockefeller Plaza, New York 20, N. Y.

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is nebulous. The Selective Service Law says a plant can be seized for refusal to accept or deliver on a defense contract, and the Defense Production Act allows seizure where facilities are needed for defense. How to stretch this to cover strikes has not been revealed.

Truman's disappointment over failure of a popular demand that he be "drafted" for another term is keen and overwhelming. He found that even his Trumancrat aides want a change. He expected McGrath to move fast to check and dissipate the odor of scandal and corruption in government.

Eisenhower is the beneficiary of most of the Trumancrat leaders who are leaping to safety after Truman's declaration he will not run. They are opposed to Russell as a unit, and they have no confidence in the ability of Kefauver, Kerr or Stevenson to win. Some of them have long been sympathetic to Eisenhower's candidacy, but have not made open declarations.

Taft leaders assert that Trumancrats are voting as Republicans in all of the state primaries, and working in behalf of Eisenhower. There is growing indication that the whole of the political machinery of the Truman organization will be thrown behind Eisenhower if he seems to be in reaching distance of the G.O.P. nomination.

Some of the Truman adherents in Congress have said if Eisenhower is nominated, the scandals and corruption of the Truman regime will not be an issue in the campaign. They say Eisenhower has been far removed from them, and his failure to assail them would stop other Republicans from doing so. They believe, too, that waste, extravagance and high taxes will not be attacked if Eisenhower is the G.O.P. standard bearer, with Fair Dealers giving support to him, too.

Most compelling force behind Fair Dealers getting on Eisenhower's wagon is that Truman does not want to make a whistle-stop trip to defend government scandals. Some of his aides say he will do so if G.O.P. leaders make attacks on tax frauds and graft, influence peddling and mink coats, and frauds in grain storage. But Republicans are doubtful he will do so.

Hard kernel in the efforts to effect a truce in Korea is that the Reds will not turn loose U. S. war prisoners until they have what they want. The U. S. has refused to send back its Red prisoners, because they say they are faced with certain execution. The Reds insist on the return of all these prisoners before they make a truce or surrender U. S. prisoners.

Appropriation bills will not be seriously reduced from the Truman budget figures in the final action of Congress. Sharp cuts have been made in the House in some spending proposals, but the Senate is expected to restore most of the reductions. Congress is going through the motions of economy with small indication it will do any better in this session than it did in the last one.

Army spending is turning more and more into a pump-priming process to assure "good times" in the second half of the year. In this half year the Administration will spend $11 billion more than is coming into the Treasury in revenues. Pending appropriation bills would add substantially to this amount.

The $7.9 billion foreign aid bill is expected to emerge from Congress with only a few cuts in minor spots. All but $2 billion of money would go to western Europe. The funds would be distributed to military programs and economic systems of "American allies" in both Europe and Asia.

A way will be found to quietly channel federal production contracts to New England factories in need of more business, according to a Massachusetts House member. Channeling will not include negotiated contracts, but will be

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used where a statutory barrier is not in conflict. There is no assertion, however, that textile contracts will be used in the channeling.

Efforts to pour defense contracts into New England simply to "relieve" unemployment in distressed areas, will be bitterly resisted. This is the declaration of Chairman Maybank of the Senate Banking and Currency Committee. The channeling plan is being pushed by textile union officials who say the Southern states enjoy "regional favoritism" in government buying, and who want contracts arbitrarily shifted to New England.

Hearings on pleas for contract channeling by a Defense Mobilization panel failed to substantiate claims of "regional favoritism" in making existing contracts. The hearings bogged down finally in a plea for a "government subsidy" to some New England industries as a means of relieving unemployment, and presumably obtaining contracts on a less-than-cost basis. Such action, however, would require legislation by Congress.

Some House members were appalled that the nation's industrial peace should be lodged in inexperienced young collegians like Feinsinger. Apart from members who had been on big union payrolls, W.S.B. does not have an experienced or distinguished man in the field of labor relations among its members. Most of them are political and economic unknowns.

Singularly enough, W.S.B. members who were on union payrolls before appointment ran the ball right down the line for Murray in steel strike preliminaries. Others of Truman's mediocre board were alien to handling such disputes, and the board staffed by a callow group drawn from the New Deal's intelligencia. tsia

There is some reason to believe Truman will try to return to the Senate again from Missouri. After saying he would not seek White House occupancy again, his aides made contact with Missouri politicians asking that they start a "boom" for Truman to return to the Senate.

Public Health Service is putting finishing touches on a plan to assign a serial number to every citizen to carry from birth to the grave. These numbers would be used on all occasions involving a public record, from marriage certificate to driver's license, and in signing a legal document, contract or conveyance.

Trumancrats would like to patch up a truce with the Southerners on the "civil rights" issue for the rest of this year. They have in mind to offer a watered-down version of the Massachusetts "educational" law, leaving the issue to the states to deal with through commissions set up to conduct "educational" campaigns against racial prejudice, but not vested with drastic powers similar to the New York law.

No one is sure Truman is going to bow out of politics, although removing himself from the area of re-election. General feeling is that he has some ability, but was pushed into a position far beyond his grasp and training, and forced to deal with problems in which he could only helplessly muddle, or turn to labor bosses or machine politicians for advice and assistance.

Truman is making demands on Democratic Party Chairman McKinney that Hubert Humphrey of Minnesota be chosen as keynoter at the national convention. McKinney has refused to accede, and says that convention officials must be acceptable to all sections of the country. He told Truman pointedly he will not sanction a convention staffed and controlled solely by Fair and New Dealers, or allow sectional appeals like "civil rights" to dominate the convention program. Truman and McKinney seem very close to the breaking point.

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The SOUTHERN TEXTILE HERITAGE

By W. M. McLaurine

— Part Two of a Series —

IN THE evolution of these stories, I should state that I began my association with the industry in Georgia when its leaders were men like the late Fuller E. Callaway, a former president of the association and who at his death was so ably followed by his two sons, Cason J. Callaway and Fuller E. Callaway, Jr., both of whom also served as president of the American Cotton Manufacturers Association; when R. E. Hightower of Thomaston, Ga., was active with his sons, one of whom, the late W. H. Hightower, became president of the association; men like the late George S. Harris and J. H. Cheatham, who served as head of the Cotton Manufacturers of Georgia and president of American Cotton Manufacturers Association; when the late Benjamin Elsas (succeeded by his able son Norman Elsas), George H. Lanier, Captain Harry Meikleham, W. C. Bradley, Robert Jones, Sr. of Canton, E. T. Comer of Bibb, London A. Thomas; when W. W. Banks, W. J. Vereen, W. D. Anderson, "Bishop of Georgia," Clifford J. Swift, all of whom have been presidents of American Cotton Manufacturers Association; when E. W. Swift, Harry B. Williams, Paul K. McKenney, and many other notables were actively in charge of the mills.

In Charlotte, after I was elected as secretary and treasurer of the American Cotton Manufacturers Association, my scope of acquaintances was further expanded in North Carolina by contact with such men as Harry A. Fitzgerald (the "Bishop of Virginia"), S. W. Cramer, William A. Erwin, C. E. Hutchison, Benjamin B. Gossett, Thomas H. Webb, all of whom served this industry as presidents of the American Cotton Manufacturers Association and have now left their heritage to others; then there were K. P. Lewis, Herman Cone, A. M. Dixon, Charles A. Cannon and Harvey Moore, who are still living and are yet valiant manufacturers who served as presidents of this association. To this list should be added the Entwistles, the Coopers, the Shufords, the elder Cones, Agnew Bahnson, the Haneses and the late Charles W. Johnston, Alex Fairley and R. C. Moore. These and others have become a part of me and have left and are leaving lasting influences on the industry.

In South Carolina, whose textile association is now ably directed by John K. Cauthen since the resignation of the late distinguished W. P. Jacobs and his secretary, Sadler Love, who accepted similar positions with the American Cotton Manufacturers Association, these men—James P. Gossett, W. E. Beattie, Capt. Ellison A. Smyth, John A. Law, James D. Hammett ("Bishop of South Carolina"), and T. M. Marchant, all now deceased but once mighty manufacturers and past presidents of this association. Then there are Allen F. Johnson, B. E. Geer, R. E. Henry, Fred W. Symmes, Walter Montgomery, Ellison S. McKissick, all past presidents and still exercising potent influences in the industry.

Along with these must be mentioned the senior Montgomery brothers, Col. Leroy Springs (followed by his distinguished son, Col. Elliott White Springs), Foster McKissick, W. J. Bailey, James C. Self, J. C. Evins, D. W. Anderson, George Wright, the Chapmans, their sons and dozens of others.

In Virginia and North Carolina there was Luther Hodges (who guided the destiny of Fieldcrest Mills), while the Kendall Mills in North and South Carolina are ably directed by H. K. Hallett, soon to be president of the present American Cotton Manufacturers Institute.

In Alabama, whose textile association is so ably directed by the enthusiastic Col. Dwight Wilhelm (who recently made headlines and notoriety by his publication of "A History Of The Textile Mills Of Alabama"), there were Donald Comer ("Bishop of Alabama"), and his brother, Hugh—both served as presidents of this association; they, with their nephews and relatives, along with the Redmonds, the Philips and the Russells are so influential that they largely speak for the industry in Alabama.

In Louisiana there was the late A. W. McLellan, a past president, whose Crescent City charms and affability will always be remembered. In Texas there were men like W. B. Munson, R. Miller and others, and finally, the spokesman for Tennessee was always the late Ernest Rees of Fayetteville.

These are only a few of the many names I could record but space does not permit. These older men were and are patriots and throughout the world made a name for themselves by their contributions and fame for the industry because of its products. They were and are mighty men of valor, personality, ability and energy. They were original stock. Memory carries these and others in my personal "Hall of Fame."

I have often wondered about the safety of the industry through the succeeding generations and how it would be when these originators and builders turned over the industry to other hands. Last year I took inventory, because my heart still lies in "Caesar's Coffin."

At the 1951 convention of the Cotton Manufacturers Association of Georgia, I saw the younger Callaways, George E. Glenn, the Hightower sons and grandsons, Joe L. Lanier, Donald Harvey, Frank Bradley, Mack Cheatham, Chas. C. Hertwig, Henry Swift, Paul McKinney, Jr., M. M. Bryan, Jr., and a dozen others who had stepped into leadership and were making good. I was really proud of these new leaders as they discussed industry problems and gave unquestionable evidence of their character and ability.

My successor in Georgia, T. M. Forbes, has made for himself a place of honor and distinction not only in Georgia but in the Southern industry. He has spearheaded all offensive and defensive actions in Georgia that have

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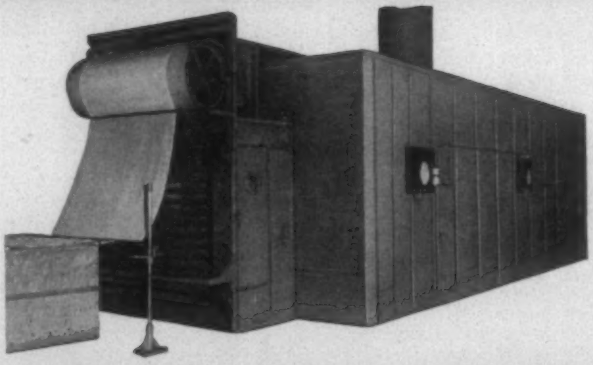

Originally used for drying washed dye-house goods and materials like toweling, this dryer has been refined over the years giving it a much wider application. Many mills handling spun rayons and similar goods that require carefully done finishing are finding this a highly efficient machine for drying or curing.

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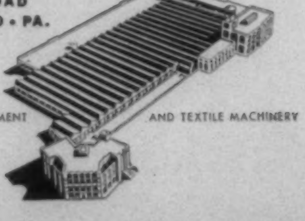

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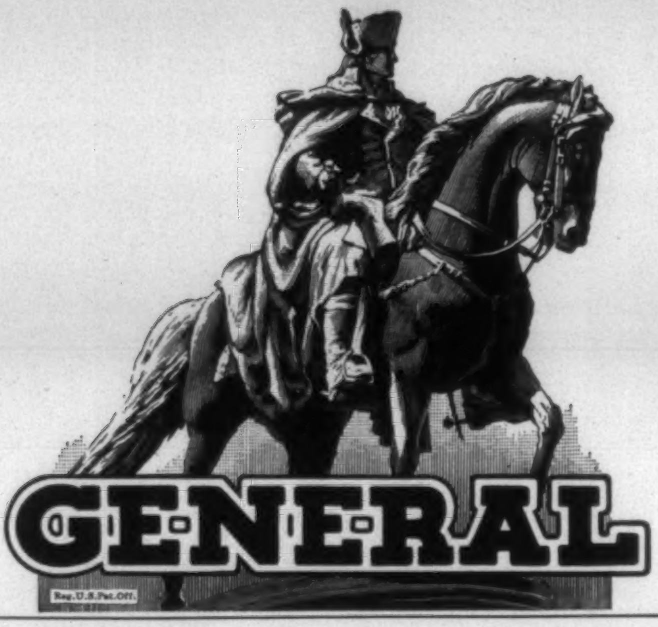

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safeguarded and promoted the industry's welfare. His influence in the industry is important.

I came back home and went to Pinehurst to the North Carolina meeting of the industry. There I found Hunter Marshall, the senior secretary of the South, still going strong and surrounded by many young men such as Herman Cone, William Cannon, W. H. Ruffin, the Shufords, the younger Linebergers and Stowes and many others. One observation that appealed to my emotions was the fact that the old Rocky Mount Mill is in better condition than it has ever been since 1810 and was still operated by a Battle — Hyman Battle; the old Schenck Mill founded about the same time is still operated by a Schenck and that Gaston County through all of its changes and evolutions still retains family names and remains the capital for the combed yarn industry.

I then looked over other states. In South Carolina I found Walter Montgomery going vigorously, Stanley Converse, Alan and Bill Sibley, Billie Beattie, young Jim Self, young Carter Henry, young Jim Hammett, Silas Bailey, Elliott Springs, the Chapman sons and grandsons, Wilbert Wood and many others carrying on the same serious services as their sires. In Alabama, the Russell sons, the Comer sons, Craig Smith, Comer Jennings, young Redmond, and others were not lagging but growing in the enthusiasm of heritage. In Tennessee, Ernest Rees, was succeeded by his son.

Today, since the death of W. P. Jacobs, who succeeded me, the active heads of the American Cotton Manufacturers Association, recently organized and re-named the American Cotton Manufacturers Institute because of the merging of the American Cotton Manufacturers Association and the Cotton-Textile Institute, are two young and very able men. Bob Jackson, vice-president, and Sadler Love, secretary and treasurer. These officers are assisted in their efficient administration by a large staff of experts in the various fields in which the industry is interested.

The above record furnishes a type picture of a great galaxy of notable and noted men. The few successors named are only a sample of the type of men who now operate the plants. They are worthy and well qualified but as yet they have not faced much of the bitterness of the road traveled by their forebears.

This is a rapidly changing world. Perhaps it is fortunate that after these founding fathers established the industry and had become so definitely encased in the philosophies and customs of the struggling days through which they had gone, the impetus of science and society might have been too great for them to endure.

They did their part well and these young executives, while they can never have the experience and outlook of their predecessors, they have something else and that is a training in science, a knowledge of society and government, an elasticity that was denied those whose inheritances they now administer.

The textile industry has always been a risky industry, full of challenge, full of problems, and will always remain a heavy and cumbersome giant in its efforts to adapt itself to the growing economic and social demands of a democratic society. It is an industry that can not be regarded lightly. It must be taken seriously at all times and treated intelligently. It will never become an automatic machine. It will always require the time and patience, intelligence and guidance of real men devoted to the progress of textile manufacturing.

These new executives are now married to the textile industry. This act has created serious, time-consuming jobs. There are not so many extraneous things that can be done often if duties are discharged completely. For my part, after having seen many of these new executives, have heard them talk and studied their expectations, I am not disturbed.

"I should think it would be cheaper to put guard rails around the tanks."

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"Prufcoat has been the standard in our plant for all corrosion areas for some six years now," the superintendent of this plant recently reported . . . "Although we have continuously checked Prufcoat with other materials offered to us, we have not found anything to compare favorably with it."

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Provides Positive Adhesion and Eliminates Underfilm Corrosion

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textile bulletin

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It Did Happen

We never thought it could or would happen but it did.

An association president making his report before going out of office made a detailed and full report, including many constructive suggestions, and did so without reading from typewritten sheets or even referring to a manuscript.

D. H. Morris, III, president of the Alabama Cotton Manufacturers Association, made the annual "report of the president" at the recent meeting at Biloxi, Miss., and made a fine impression because he made a forceful address without reading a word of it.

Too often an association president, realizing that he is going out of office, rushes a few general observations into a few typewritten pages and reads them at the annual meeting in a droning voice.

We often wonder if he would make the same kind of address if it had to be made when he was about to be elected to the office or was seeking election.

The average annual address of a president seems to say, "I am through with the job and therefore there is no need for me to make any special effort."

The address which retiring president D. H. Morris, III, made before the Alabama Cotton Manufacturers Association, parts of which are published in this issue, made a very fine impression because it was spoken and because it covered every problem and activity of the association.

Production Vs. Consumption

It is not unusual to hear people say that we have added too many spindles, too many looms or too many knitting machines.

Before we become too certain that we have made too great an increase in our ability to produce textiles, we should take a look at the increase in population as more people mean a greater consumption of textiles.

The amazing growth in U. S. population during the war decade just past—an increase of nearly 20 million persons—came as a surprise to both population experts and laymen.

If we assume the medium population estimate, that would mean an increase of one-fourth in our market for manufactured products right here at home in the next 25 years—if each person consumes the same as now.

Along with the population gain of almost 20 million persons in the decade between 1940 and 1950, we have been able to increase our standard of living.

This growth in population should also have real significance for cotton. The increase in the number of consumers for clothing and other textile products will continue to be an important point of strength in the cotton situation even though competition between cotton and the synthetic fibers continues and becomes even keener.

There will be periods, such as now, when merchants are allowing their inventories to dwindle and are withholding orders, but with the population of the United States increasing at the rate of 20 million, or more, persons each decade, we have reason to anticipate that consumption will always be upon an ever increasing scale.

The Voice Of Friends

Booker T. Washington, the most highly regarded Negro who has ever lived in the United States, said to the white people of the South in an address:

> We will stand by you with the devotion that no foreigner can approach, ready to lay down our lives if need be, in defense of yours, interlacing our industrial, commercial, civil, and religious life with yours, in a way that shall make the interests of both races one. In all things that are purely SOCIAL, we can be as separate as the fingers, yet one, as the hand, in all things essential to mutual progress.
>
> The wisest among my race understand that the agitation of social equality is the extremest folly and that progress in the enjoyment of all the privileges that will come to us must be the result of severe and constant struggle rather than an artificial forcing.

The C.I.O. Pay-Off

Harry Truman appears to have deliberately set out to pay off the C.I.O. for the political support which it has given him, especially for the support which made it possible for him to be re-elected in 1948.

He appointed a Wage Stabilization Board upon which the representatives of the public were former paid representatives of organized labor.

His Wage Stabilization Board in the case of the steel industry gave Philip Murray everything which his C.I.O. sought, including a "union shop," which is a "closed shop," in effect, as every new employee must join the union within 60 days or be fired.

The Wage Stabilization Board, without any legal authority, proposed to set aside the Taft-Hartley Law and set in motion forces which will eventually deny to all workers the right to work without paying dues to a union.

Without the slightest shadow of a legal right, President Truman seized the steel mills and at the time this is written proposes to advance wages to C.I.O. desires, while under government operation.

President Truman knows, and his Wage Stabilization

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Board knows, that any advance in steel wages will set in motion another round of wage advance, cause the public to pay higher prices for all commodities and produce a wave of inflation.

We were not privileged to hear the reply which Clarence B. Randall, president of the Inland Steel Co., made to the address of Harry Truman but it was reported to be a masterful defense of the steel industry.

If the time has come when a president of the United States can illegally seize an industry and force it to meet the demands of the C. I. O. we are indeed in the midst of evil days.

Killing The Investigation

It was early December when President Truman rushed up from Florida roaring "Wrongdoers have no house with me."

Newbold Morris, whose personal record and affiliations were none too good, was appointed to do the investigating but when he asked for financial statement of Attorney General McGrath and other Cabinet members and those of certain other persons high in New Deal circles, he found himself out of a job. McGrath resigned apparently rather than let it be known how much money had passed through his hands.

President Truman then appointed as Attorney General James Patrick McGranery, a loyal Democrat and a total New Dealer.

Now Mr. McGranery says:

> There probably is some corruption . . . But I do not believe it is as widespread as many people say.

This is the end of what people thought would be a real investigation of corruption which has been known to be rampant in Washington.

Truman, realizing that he would be overwhelmingly defeated, has decided not to run for re-election and he has now made it certain that loyal New Dealers will be permitted to keep the funds they have acquired through corruption.

In Washington, D. C., the leaders of corruption describe Attorney General McGranery as "safe," meaning that with him in the prosecutor's seat, they are "safe."

Summer School Of Moscow University

Some of our readers will remember our criticism, in the early 1930s, of those who were sending American young men and women to Moscow to study Communism.

They will especially remember our criticism of President Frank Graham of the University of North Carolina for sponsoring a summer school at Moscow University.

In spite of the fact Frank Graham's name was printed as one of the sponsors and he made no denial of his sponsorship, we were subject to much abuse for suggesting that instruction at the summer school of Moscow University was intended to sell Communism to the young people who attended.

At Baltimore, Md., on March 17, 1952, William Odell Nowell, a Georgia Negro, now of Detroit, Mich., told of his Moscow instructions to a Federal jury hearing the trial of six persons—five of them admitted Communists—charged with conspiring to advocate overthrow of the government by force.

Nowell identified Philip Frankfeld, one of the six on trial, as one of the troup with whom he attended the Lenin School in Moscow in 1931.

He said that part of the school's instruction dealt with "the theory of self-determination."

The theory, he explained, was applied to the Negro people in the "black belt" of the South—"the theory that considers Negroes as constituting a nation within a nation."

Thus, what we said in the early 1930s about the objectives and purposes of sending young men and women to Moscow University is now fully substantiated.

When our government finally decided that American Communists were not a political party but should be treated as enemy agents, several Communists while under examination admitted that there had been a fully organized Communist unit at the University of North Carolina at Chapel Hill and proved the accuracy of statements for which we had been greatly abused.

Most of the Communists have now left Chapel Hill and it is no longer a focal point for them, but we cannot help calling attention to the fact that every statement we ever made about Communism at Chapel Hill has been proved true.

Not a single statement made by us during those years has ever been disproved.

Profit From Vision Program

Employees are sometimes prone to look with suspicion upon industrial vision programs, as a lot of needless red tape or a threat to their jobs, says the Better Vision Institute. On the other hand, management sometimes fears that these programs are a waste of money to the companies that adopt them. But the truth is that well-planned vision programs are definitely to the advantage of both management and labor.

Such programs involve the screening of employees to determine their visual suitability for specific work, and the referral to vision specialists of workers who are in need of professional eye-care. Particular attention is also given to plant conditions, such as lighting and color of walls, ceilings, floors, and machinery.

From the worker's standpoint, it is a good thing to have a visual screening test before placement in a specific job. Frequently, people who had been considered unfit for work have been found quite capable of giving good performance when placed in the right niche. And it is almost unheard of for an employee to lose his job or have his salary reduced as a result of a vision program. Furthermore, many workers who have been suffering unknowingly from seeing difficulties are greatly benefited by having their troubles disclosed and being referred to specialists. Proper placement and eye-care bring better production, more efficiency, a longer period of gainful employment, less lost time, and higher income. In addition, accidents are reduced by better visual efficiency, as well as by safety goggles and the use of certain colored paints to denote danger.

Management is bound to profit by the increased productivity and decreased absenteeism and spoilage of the employees. Moreover, labor relations are improved and personnel turnover is cut down. The reduction of accidents

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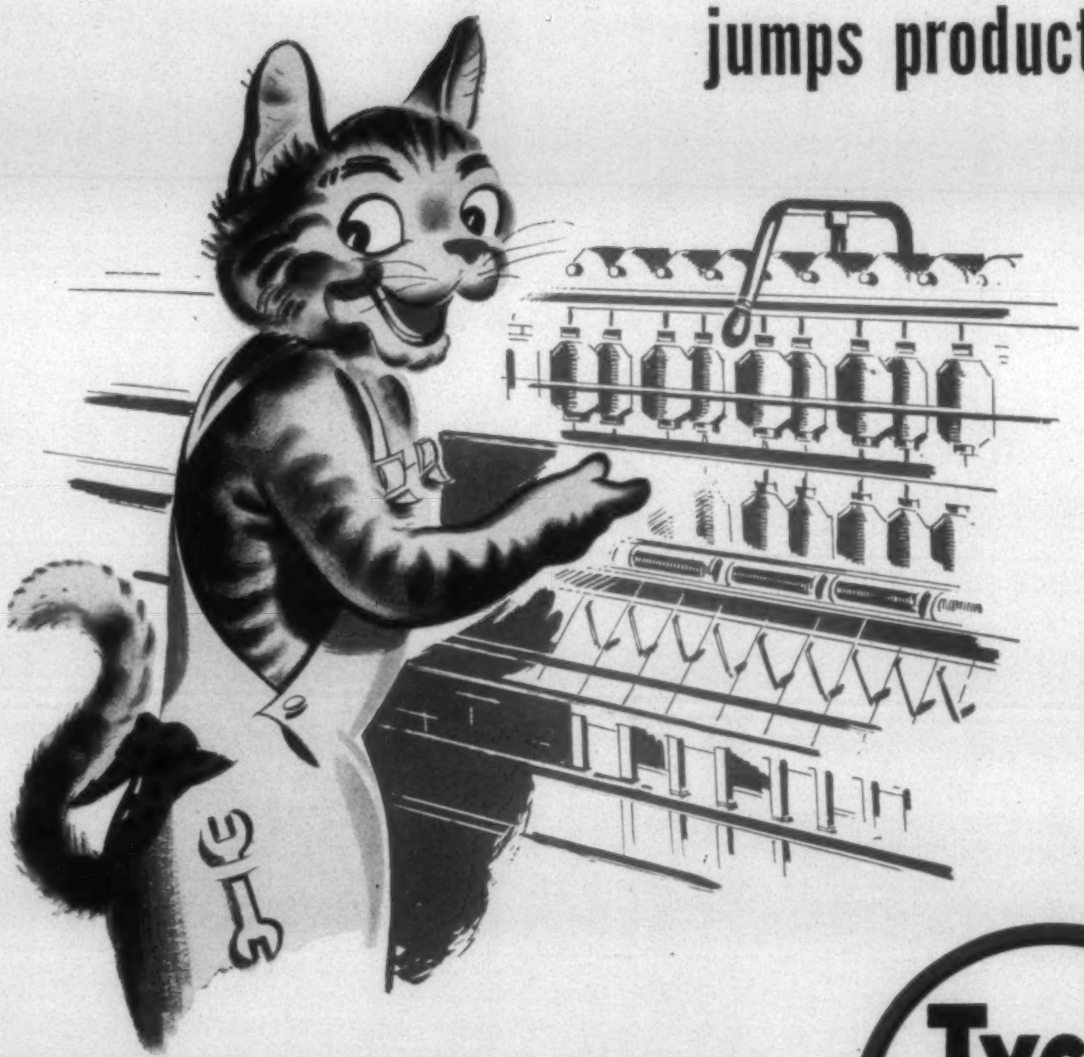

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A wide range of Tycol Alweave Textile Oils is specially designed in both mineral and compounded grades to cut costs in other processes in your mill.

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TEXTILE INDUSTRY SCHEDULE

—1952—

April 24—Electrical-textile conference, **AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS**, Philadelphia (Pa.) Textile Institute.

April 26—**PIEDMONT SECTION, A.A.T.C.C.**, Clemson (S. C.) House Hotel.

April 26—**TEXTILE OPERATING EXECUTIVES OF GEORGIA** (carding and spinning meeting), Hightower Textile Building, A. French School of Textiles, Georgia Institute of Technology, Atlanta.

May 1-2—**Conference on electrical application in the textile industry, Textile Sub-section, A.I.E.E.**, Hightower Textile Building, Georgia Institute of Technology, Atlanta.

May 1-3—Annual convention, **PHI PSI** textile fraternity, Clemson (S. C.) House.

May 3—**SOUTHEASTERN SECTION, A.A.T.C.C.**, Ralston Hotel, Columbus, Ga.

May 4-6—**NORTH CAROLINA INDUSTRIAL SAFETY CONFERENCE**, George Vanderbilt Hotel, Asheville.

May 6-9—**INTERNATIONAL LIGHTING EXPOSITION AND CONFERENCE**, Cleveland (Ohio) Auditorium.

May 12-17—**NATIONAL COTTON WEEK.**

May 15-17—Annual outing, **CAROLINA YARN ASSOCIATION**, The Carolina, Pinehurst, N. C.

May 15-17—Annual convention, **AMERICAN COTTON MANUFACTURERS INSTITUTE**, Haddon Hall, Atlantic City, N. J.

May 17—**SOUTH CENTRAL SECTION, A.A.T.C.C.**, Hotel Patten, Chattanooga, Tenn.

May 29-31—Annual convention, **SOUTH CAROLINA TEXTILE MANUFACTURERS ASSOCIATION**, The Cloister, Sea Island, Ga.

June 6-7—Annual outing, **PIEDMONT SECTION, A.A.T.C.C.**, Ocean Forest Hotel, Myrtle Beach, S. C.

June 6-7—Annual outing, **SOUTHEASTERN SECTION, A.A.T.C.C.**, Radium Springs, Ga.

June 12-14—Annual convention, **SOUTHERN TEXTILE ASSOCIATION**, Ocean Forest Hotel, Myrtle Beach, S. C.

June 23-27—Annual meeting, **AMERICAN SOCIETY FOR TESTING MATERIALS**, Hotel Statler, New York City.

Aug. 22-23—Summer outing, **SOUTH CENTRAL SECTION, A.A.T.C.C.**, Chattanooga (Tenn.) Golf and Country Club.

Sept. 10-11—Fall meeting, the **FIBER SOCIETY**, Princeton, N. J.

Sept. 12-13—**PIEDMONT SECTION, A.A.T.C.C.**, Charlotte (N. C.) Hotel.

Sept. 13—**SOUTHEASTERN SECTION, A.A.T.C.C.**, Atlanta, Ga.

Oct. 3—**TEXTILE QUALITY CONTROL ASSOCIATION**, Raleigh, N. C.

Oct. 6-11—**SOUTHERN TEXTILE EXPOSITION**, Textile Hall, Greenville, S. C.

Oct. 16-17—Annual meeting, **NORTH CAROLINA COTTON MANUFACTURERS ASSOCIATION**, The Carolina, Pinehurst, N. C.

Oct. 25-30—Annual meetings (as part of a six-day cruise to Bermuda from Norfolk, Va.), **CARDED YARN ASSOCIATION** and **SOUTHERN COMBED YARN SPINNERS ASSOCIATION.**

Nov. 6-8—Annual national convention, **AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS**, and **TEXTILE DYEING AND FINISHING EXPOSITION**, Statler Hotel, Boston, Mass.

Dec. 6—**SOUTH CENTRAL SECTION, A.A.T.C.C.**, Hotel Patten, Chattanooga, Tenn.

— 1953 —

Feb. 18-20—**COTTON RESEARCH CLINIC**, General Oglethorpe Hotel, Savannah, Ga.

June 29-July 3—Annual meeting, **AMERICAN SOCIETY FOR TESTING MATERIALS**, Chalfonte-Haddon Hall, Atlantic City, N. J.

Sept. 17-19—Annual national convention, **A.A.T.C.C.**, Conrad Hilton Hotel, Chicago, Ill.

— 1954 —

April 26-May 1—**AMERICAN TEXTILE MACHINERY EXHIBITION**, Atlantic City (N. J.) Auditorium.

Annual convention, **A.A.T.C.C.**, Atlanta, Ga. (Dates not yet selected.)

saves money not only directly but indirectly through the lowering of insurance rates. For these rates are dependent upon the rate of accidents, and they go down when accidents go down. In some cases a vision program contributes more to accident reduction than any other single factor. All in all, management needs to realize that these programs are not charity—they are just good business. For a man cannot work any better than he can see.

Many large companies spend large sums of money on selection of employees, but only ten to 15 per cent of them are doing a careful job of visual screening at the point of selection. If practical, efficient vision programs become the general rule, it will be a great help to management, to labor, and to the defense effort, the institute declares. It will mean that industry is taking care of itself, without government interference, in the true American tradition.

Next Thing To Lynching

Out of New York City, from time to time, comes advice to Southerners on the subject of man's relationship to his fellow man. Not all Southerners are grateful for this advice and some among them are so crude as to point out the mote in their Northern neighbor's eye. The South now reads of a strike by bakery truck drivers in New York. One of its ugly phases has been the beating of independent bakery drivers by striking unionists. The object of the beatings obviously is to discourage those independents who would continue working for a living while strikers strike. The right to work is not too well guarded in this land. The beating of workers who persist in trying to earn a living while others strike is a crime which is first-cousin to lynching.—*News & Courier,* Charleston, S. C.

Too Bad

A schoolboy was making a speech about the national debt: "It is too bad that future generations cannot be here at this time," he said, "to see the magnificent things we are doing with their money."

Chittlins As Peacemaker

The Wilson Society of Chittlin Eeaters now brings together as diverse group of politicians under its banner as you can find breaking bread—or chittlins—anywhere in North Carolina.

This week they inducted—under conditions which could have been more terrifying than the abandoned practices of Greek Hell Week—L. H. Fountain, candidate for Congress; Thad Eure, secretary of state; John Marshall, secretary to Governor Scott; and Carl Goerch, editor.

Thus chittlins played the role of mediator and peacemaker for this charming occasion, even down to the final touch.

If chittlins did a good job here, maybe they would be welcome elsewhere on the stormy Tar Heel political front. Might we suggest, for instance, that Kerr Scott, Junius Powell, Jonathan Daniels, Charles A. Cannon, David Clark, Hubert Olive, Bill Umstead and all six candidates for the Supreme Court receive nomination for membership at once?

If they can eat chittlins together, they can stand anything. —*Greensboro* (N. C.) *Daily News.*

Every Top Management Man... In Every Industry

SHOULD BE ABLE TO ANSWER THESE QUESTIONS ABOUT A MOST CRITICAL EMERGENCY IN OUR COUNTRY'S AFFAIRS

Q. Why is iron and steel *scrap* a matter of importance to me?

A. Steel for our country's military program and civilian economy is being produced at the annual rate of 107,000,000 tons in 1951 . . . 119,500,000 tons expected in 1952. Steel-making capacity is being increased now to meet those quotas.

What Do I Get For My Scrap?

In addition to being paid for your scrap, you remove nuisance inventory from your plant—saving valuable floor space. Also, you have a better chance of *getting* new steel or steel products. But, *most important*—you help alleviate a dangerous condition threatening our country's capacity to rearm and satisfy civilian requirements at the same time.

Q. How does scrap figure in the production of steel?

A. Steel is composed, generally speaking, 50% of pig iron, 25% of "production" scrap (that is, the scrap which is produced as a by-product of steel-making) and 25% of "purchased" scrap.

Q. Is scrap getting scarce?

A. Yes. The supply of *purchased* scrap is not increasing fast enough to meet the needs of increasing steel production.

Q. What if the needed scrap isn't obtained?

A. Open-hearth furnaces will not be able to operate at capacity. That will mean a loss of steel production . . . and fewer products made of steel.

Q. Why not use pig iron instead of scrap?

A. Every ton of scrap conserves approximately 2 tons of iron ore, 1 ton of coal, nearly ½ ton of limestone and many other vital natural resources—to say nothing of the extra transportation facilities that would be otherwise required.

Q. How can *more* scrap be furnished?

A. By everybody pitching in—as we always do in every emergency—and searching out all possible sources of scrap.

Q. What are these sources?

A. Metal-fabricating plants normally turn over to scrap dealers the scrap left from machining. But there's not enough of this to fill our present enormous need. So everybody—both in and out of the metal-fabricating industries—must sell scrap in the form of *idle metal.*

What Is Scrap?

Every pound of idle metal is needed to keep our steel mills operating at top capacity. Sell your idle metal to a local scrap dealer right away.

What Do I Do *First*?

Write for free booklet. It tells how to set up a Scrap Salvage Program in your plant. Thousands of plants are cooperating. Do *your* part now! Address Advertising Council, 25 West 45th Street, New York 19, N. Y.

Q. *We* don't *produce* scrap—how can *we* help?

A. Scrap is any kind of iron and steel that's gathering dust—obsolete machines or structures, jigs and fixtures, pulleys and wheels, chains and track, valves and pipe—*anything* with rust on it or dust on it. Non-ferrous scrap is needed, too.

Q. What do we do with it when we find it?

A. Use your normal channels or get in touch with a recognized scrap dealer.

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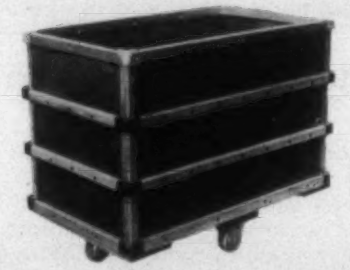
No. 1000 Fiber Truck For Long and Satisfactory Service



This is a sturdy truck upon which you can depend for long and satisfactory service.

Compare its specifications with those of any other fibre truck.

- .090 vulcanized fibre, securely riveted to hardwood rails with solid steel rivets. These solid rivets are placed at short intervals to prevent buckling.
- Hardwood solid or slatted bottom, sanded to a smooth finish.
- Heavy duty metal top rail.
- Heavy duty metal corners.
- Casters securely bolted to bottom.
- Finished in clear lacquer, or painted, for added protection against moisture.

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WHAT OTHERS ARE SAYING

Cotton Hangs On

SPEAKING recently, Robert Jackson of the American Cotton Manufacturers Institute said that the pessimism of a few years ago over the future of raw cotton has given way to a new-found confidence in the competitive power of natural fiber.

At the same time he echoed sentiments that have been widely expressed when he said that the textile industry needs, more than anything else, flexibility and pliability, which are denied under price control which has caused a depression in the industry for the past year.

The cotton textile situation is not irresponsible talk. Anyone who will take the trouble to visit a textile community and keep his ears open will not even have to ask questions to hear that business is poor—made so by the government restrictions.

It is gratifying, therefore, to note that something is being done about it, and espceially that a South Carolinian has been sent to Washington as emissary in the matter. As chairman of a mobilization committee of the A.C.M.I., Ellison McKissick, has gone to Washington to tell congress that price controls are blocking cotton's recovery from the year's depression.

We believe the point has been made and established as fact that given an equal chance cotton can hold up its head against normal competition. In other words it can "meet the raging of the skies" of business, "but not an angry father"—or misguided paternalism of centralized government.—*The State,* Columbia, S. C.

Serious Threat Removed

REFUSAL by the Office of Defense Mobilization to give New England industries preferential awards of defense contracts to relieve unemployment removes a distinct threat to the South.

Preferential treatment, which would have nullified low bids, had been demanded by Eastern manufacturers, governors, and congressmen. They claimed this to be the only method whereby their textile, apparel, and shoe plants could be kept in operation.

If the government had agreed to this proposal, Southern industries would have been seriously damaged. Contracts they should have received on a bid basis would have gone to New England, primarily to bolster a sagging economy.

Besides being obviously unfair in that the plan discriminates against the South, it would send costs of the national defense program soaring. Low bids would not be a criterion for contracts; the major factor would be extent of unemployment.

Equally as serious would be the long-range effects if the government adopted this policy. Once a precedent was established, the government might continue to award contracts to alleviate unemployment.

Cause of unemployment would become relatively unimportant. It could be the result of inept management, labor disputes, shift of population, or high costs of production. Regardless, an industry would be entitled to preferential treatment.

New England's textile and apparel industries have not been demoralized because of the war effort. They are losing their competitive position simply because Southern management and workers produce at a lower cost.

The Office of Defense Mobilization has acted with wisdom in refusing to be a party to artificial restrictions on progress.—*Florida Times-Union,* Jacksonville, Fla.

Mills Face Socialism

SOCIALIST thinking, which has grown in the last 20 years to the point of making inroads on many personal liberties, continues to show itself in various ways. Latest is in the arguments over textile mill contracts.

Earlier Americans who worked hard to make certain there would be no restraint of trade would be startled at some lines of reasoning today. One of the socialistic proposals is to take steps to spread contracts throughout the textile industry. Another is to use government orders to supplement civilian orders "so as to maintain economic balance of industry."

The old, time-proving economic law of supply and demand has long since been discarded as outmoded by the disciples of the modern "spend in the red" economists. Freedom of enterprise is taken away by such reasoning when the government holds the reins of industry and saps away savings from the public in attempting to keep an economic balance.

Any restriction on the right to bid is basically unfair. It protects poor management while penalizing efficiency. The mill able to turn out a better product at less cost would be told to remain idle until the backward opposition could obtain as many orders.

We must keep a place in America for freedom of opportunity. If initiative is killed, then democracy will be gone. Capitalism, the creator of new jobs and a higher standard of living, would give way entirely to "statism."

Socialism must be kept out of our economy. Therefore, the socialist ideas on textile contracts should be rejected. —*Greenville* (S. C.) *News*.

Our Replacement Problem

IT IS a known fact that everything made by man wears out. Little by little man-made products waste away . . . even when given the greatest care. You oil, grease, polish and paint machinery, but that doesn't keep it from wearing out. That only slows down the wear. Like a man, machinery and equipment age with time.

Stop a minute. Look around. Everything you see is growing older. Your clothes . . . your radio or television set . . . your house . . . your car . . . everything you or anyone has is growing older by the day.

Our machinery is no exception. It too, wears out. Although we take excellent care of this equipment, it is wearing out every minute of the day. This wearing out or gradual diminishing in value is called depreciation. What causes buildings, machinery and equipment of all kinds to wear out or decay? There are several . . . wear and tear from operations . . . action of the elements, rain, snow, etc. . . .or the equipment is not able to do the job . . . or the equipment may become out-of-date.

Because of depreciation the company has to plan how they are going to replace their equipment. This is a problem too. Machinery and equipment for our plant is expensive, and because of the big sums of money involved the company has to save up

Strictly for Profit

CHOOSE CLARK

Solely on the basis of *benefit to your business* take a thoughtful look at the Five Factors of Profit built into Clark machines:

1. **TIME PROFIT**—Materials move faster, and in synchronized flow. Man-hours for loading and unloading are reduced drastically.
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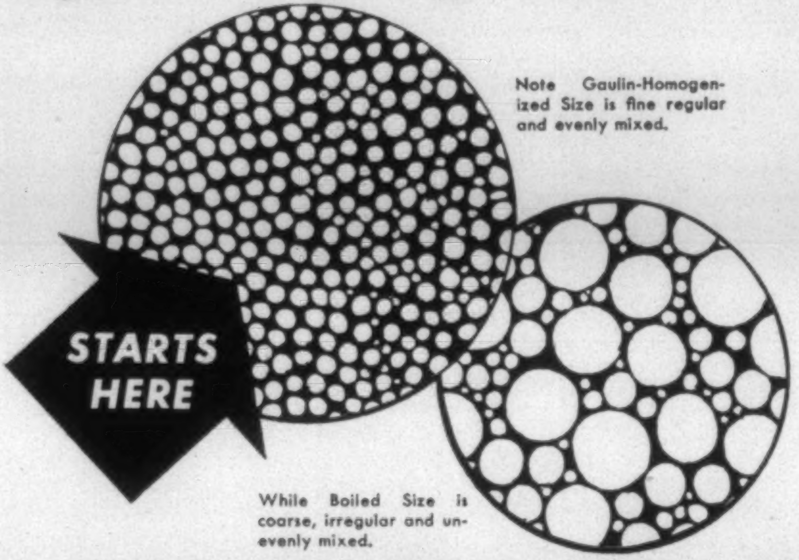
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While Boiled Size is coarse, irregular and unevenly mixed.

..with GAULIN-HOMOGENIZED SIZE

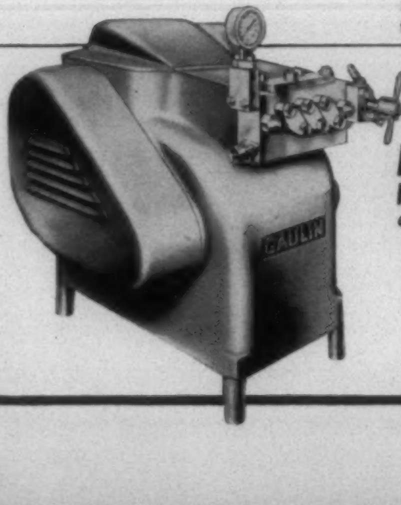
Because:

It's finer Gaulin-Homogenized size particles penetrate yarn lightly but evenly — bond fibers together smoothly, firmly . . . without coating or matting and making them brittle. The result — a more elastic yarn that SHEDS LESS . . . and BREAKS LESS at the loom and slasher.

It's more uniform Whether prepared continuously or in batches every drop of Gaulin-Homogenized size assures more consistent, uniform weaving. Mills report up to 4% higher weaving efficiencies.

It's easier to make Set the controls to the desired viscosity. A Gaulin Homogenizer reduces the human element in size-making . . . automatically maintains the right viscosity.

See your local Manton-Gaulin representative for details and other advantages.



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against the day when replacement will be needed.

The Treasury Department of the government publishes a book in which are schedules that govern depreciation of buildings, machinery and equipment. From this book the company accountants figure depreciation for our company. Take, for example, the weave room. The last XD loom that was purchased cost $1,356. Using the government depreciation schedules . . . which state that an XD rayon loom should last for 15 years . . . the company accountants set aside $90.40 to be saved each year for 15 years so that when the useful life of the machine is over, the company has enough money to buy a new XD loom . . . 15 times $90.40 equals $1,356.

However, that's the way it's supposed to work. Management knows how long it will last. But they cannot plan everything. Suppose we have a machine in the plant. Then suppose someone perfects a similar machine which will do twice the work as our machine. In order to keep abreast with competition we have to secure this new machine or lose business. In this case, our machine was not worn out but was unable to do the work fast enough. It was inadequate.

Now there is another possibility. Suppose we have a machine which insofar as use and exposure are concerned will last ten years. But suppose after several years' use, a similar but much more efficient machine becomes available on the market. Our present machine although capable of producing all we need, does not get as excellent results as the new machine. The product of the new machine proves to be of a much better quality. Our competitors are using it, so to meet competition we must get rid of our machine for whatever we can obtain and buy one of the new models. In this case, our machine became out-of-date . . . obsolete in other words.

Then, there is another cause which is serious to all of us. That is higher prices these days. High prices not only affect our daily life but affect our jobs. Suppose the company bought a machine 20 years ago for $10,000 and saved $500 for depreciation during those 20 years: Multiplying $500 by 20 gives you $10,000. But could you replace the same machine today for $10,000? The answer is definitely no.

The same machine today may cost $15,000. We should have been saving $750 a year instead of $500. But what man do you know, who 20 years ago could tell you that the machine would cost $5,000 more now than it did then?

Where is the extra $5,000 coming from? From the company savings of course. The government will not allow the company to depreciate the extra $5,000, so it will have to come out of savings.

Why will not the government allow the company to put more in depreciation? Because the more you put in depreciation, the smaller the figure that shows up on the books as profit. Taxes come from profits. Anything that lowers profits, lowers taxes too.

You can see from the examples above just a few of the problems which face management. The executives have their problems as well as we do.—*Picks and Hanks,* Marion (N. C.) Mfg. Co.

South Surprises Itself

THE facts about industrial growth in the South sometime surprise even those of us who boast most loudly on the subject.

Here are a few examples:

—A list is available of 3,000 manufacturing concerns each of which has an investment of $1,000,000 or more in Southern operations.

—Chemical plants valued at $1,000,000,000 have been built in the South in the last three years. The Du Pont company, one of the largest operators in this field, now has 20 installations in nine Southern states.

—Sixty large paper and pulp mills with a daily capacity of 25,000 tons are now operating in the South, and nine new mills involving $200,000,000 investment are under construction.

—The South produced $2,100,000,000 worth of textiles last year and paid wages of $1,200,000,000 to textile workers.

These are not the figures of a professional booster. They are the sober analysis of the Southern Association of Science and Industry. That non-profit, non-political organization, whose membership includes 170 businesses and 13 universities, has just completed a new *Southern Industrial Directory.* It is one of the most comprehensive studies ever made of economic progress in our region, as well as being a remarkably useful work of reference.

This survey goes into the "why" as well as the "what" of industrial growth in the South. M. McKinley Conway, Jr., director of the association and supervisor of the industrial survey, says the facts and figures refute any charge that "the South's recent economic progress has resulted from government-subsidized plants, special tax inducements and other artificial factors."

Rather, he adds, "Our survey makes it clear that Southern industry is expanding primarily because unexcelled business opportunities exist in the region. It gives assurance that as long as the South is given fair legislative treatment and private enterprise is allowed to act according to sound business principles, industry will continue to move into the region at a rapid pace."

Dr. M. P. Etheredge, president of the Southern Association of Science and Industry, and dean of science at Mississippi State College, quotes leading industrialists who have visited the

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NON-FLUID OIL is not the name of a general class of lubricants, but is a specific product of our manufacture. So-called grease imitations of NON-FLUID OIL often prove dangerous and costly to use.

South as saying this section may become the industrial heart of the entire country in years to come.

Findings of the association tend to confirm our view that the South's prosperity need not be at the expense of any other region, but rather that it will add to our national economic strength. As the association found, expansion of the South's own markets is one of the primary and continuing causes for growth of manufacturing here.

Our pride in what has already been accomplished must not be allowed to interfere with our fostering conditions which assure additional progress in the future.—*The Atlanta* (Ga.) *Journal.*

Industrial South and North

GOVERNOR Dever of Massachusetts and Governor Roberts of Rhode Island have proposed to their legislatures that steps be taken to halt the migration of industry from their states to the South, even proposing industrial plants built by the states, exempt from taxes, for new and expanding industries. This raises the question of what has become of the once famous industrial enterprise of New England.

The migration of New England industry, mostly textile corporations, to Southern states, has been the result of Southern advantages for the industry plus New England disadvantages. How is New England going to offset these advantages—that is without the states' subsidizing industry as the two governors mentioned above propose to do? The climate can't be changed, ability for workers to live more cheaply and comfortably in the South is due to natural advantages. The raw materials are in the South. Plentiful excellent labor is in the South. Capital, management enterprise, textile engineering training and research facilities are strong and growing in the South. Are governors of New England states going to take the position that New England industry has to be subsidized in order to compete? Where are those rugged Yankee individualists who have been the New England theme song for so many generations?

Already New England management has been telling its workers that higher production and lower wages are necessary to keep their plants going. The basic answer would be that New Eng-

BALL BEARING

Seabrook
TAKE-UP ROLL
BEARINGS

√ Reduce Costly Maintenance

√ Reduce "Seconds" to a Minimum

You can now maintain *constant control* of Take-up roll tension on Model "X," "K," and "E" looms by installing the new Seabrook *ball-bearing* Take-up Roll Bearings.

PRE-LUBRICATED

and doubled sealed, these ball-bearing units will never require lubrication.

SELF-ALIGNING

Seabrook units are easy to install, with no danger of faulty alignment.

Wear on journals is eliminated, and maintenance costs drop sharply when you install these better, longer-lived Seabrook bearings. "Seconds" due to improper Take-up roll turning is eliminated.

Make the Seabrook test for yourself. Install Seabrook bearings on the Take-up rolls of one loom or a dozen. We'll gladly help you. Let's try it now!

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Size Kettles
Tanks
Waste Screens
Special Machines Custom Built

SPARTANBURG, SOUTH CAROLINA, U. S. A.

land should develop new things, or industry more suited to the region and its raw materials and skills and natural advantages.

Meanwhile the industrial South is expanding and becoming more prosperous because the elements of expansion and prosperity exist in the South. It is the land of opportunity in the United States. And proof of it lies, in addition to what has been mentioned, in the increasing migration of talent to the South from other regions; not only talent, but capital.

A significant development in the South, again in textiles, is the diversification, the development on an enormous scale of textiles from synthetic fibers as well as from cotton. This in turn means less obsession with and dominance by cotton in the South and increasing use of other raw materials such as wood pulp for synthetic fibres. These things mean a more varied, healthy industrial development in the South and mean capital for other ventures, in kind and new.

The New England governors refer to migration of industry to the South as "raids" on New England industry. Instead it is clear that industry migrates to where it can operate best and most profitably. What New England needs is ideas instead of resentment.—*Lynchburg* (Va.) *Advocate.*

Patience and Discipline

ONE of the biggest jobs that faces America today is the job of raising children. Because to raise them right, they should not only be healthy and receive all the educational advantages the country has for them, they should be taught to work for themselves and not depend upon others or their government to provide a future for them.

Recently we read of a child in the rural section, who had fallen in an old well. The mother stood at the top and called orders to her small son until help arrived. The child did not question her command and by obedience he was brought safely up with no ill results.

Too often we think of discipline as something harsh; we dread it like the slaves of old who rebelled against their task masters. It is easy to give way, due to our present-day trends of living and raising our children, to allow them "self-assertion." If they want to obey, it's all right, and if they do not care

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Pipe sizes ¼" through 3"

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With No Headaches

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to mind their elders, or those who have gone before, let them express themselves as they may desire.

The early and formative years of our lives count for good or bad, and parents who, with patience and understanding, let their children know the value of discipline have less to fear for the future than those who let nature take its course.

The child in the well above was holding on a ledge. His mother instructed him to lean in and stay on the ledge. If he had not obeyed he would have lost his hold and dropped on into the well and possibly death.

But discipline and patience are not qualities that are needed only by the children or those growing. Adults and those of mature years must continually discipline themselves to the changes and requirements made upon them. It takes patience to do this.

Many of us fail to tap these great resources of right living. In our failure to do so we weaken ourselves and fail to measure up to our tasks as we should. —*The Commentator,* Union Bleachery, Greenville, S. C.

Who Profits From Profit?

IN THE American language there is probably no more important, nor more misunderstood word than "profit." The enemies of our economic system have been trying to make the word profit mean something unclean and unwholesome; something to be shunned; but those enemies hope to profit themselves by their attacks.

What is "profit"? According to Noah Webster, the word "profit" means "advance," "progress," "benefit." Mr. Webster, and his successors in the dictionary business, agree that "profit" comes from the Latin word "profectus." They list these additional meanings: "Valuable results," "useful consequences," "avail," and "gain."

Somehow or other, through the years, "profit" has come to mean only one thing—the increase between what it costs to make or buy something and the amount obtained by selling it without regard for cost of replacement.

Suppose a company reports that after paying all bills for supplies, wages and salaries, taxes and interest on loans, it has hundreds of thousands or even millions of dollars left over. Is that all profit? It may be, but only after consideration has been given to shareholders whose investment enables the establishment or expansion or very existence of the company; to the needs for new machinery and equipment or buildings and repairs to that now in use; to retirement of bonded and other indebtedness acquired during less profitable years during which expenses had to be met just as they do during profitable years; to research for product improvement and new products; new jobs, new methods and the myriad of other problems and matters that confront progressive management.

It goes without saying that if a company has nothing left over after meeting operating expenses of the year, that company has made no "advance" or "progress," and therefore nobody can "benefit," and in the true meaning of the word, there is no "profit."

It can be said that profit is the single incentive that inspires men and women in whatever they do. A man who works for wages or salary counts his profit in what he is able to save, the property he is able to acquire, after paying his expenses. Those savings are put to work, in a bank, in shares in a company—with the purpose of, naturally, showing a profit.

If you had a choice—as all Americans do—of working for, or investing in, a company which year after year has failed to show a profit, and a company which year after year has been paying dividends on its stocks, keeping its employees on the job month after month, year after year, which would you choose?

Also, how many stories, have you read about Americans "escaping" from the profit system into an Iron Curtain country?—*The Wingfoot Clan,* Goodyear Clearwater Mills, Rockmart, Ga.

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SELF ADJUSTING, it permits minimum separation of heddle and is longer wearing . . . more economical.

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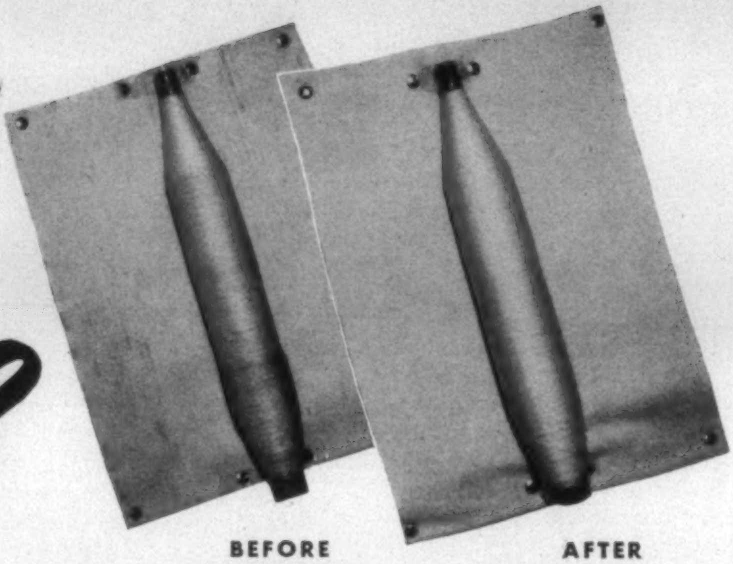
Smug about Smog?



BEFORE

Samples of yarn and cloth prior to installing an AMCO electrostatic air cleaning system. Repeated washings were unsuccessful in removing smudge from cloth.

AFTER

Following the installation of an Amco central station with electrostatic filters, these results were obtained. Freedom from carbon and dirt in air spelled the big difference!

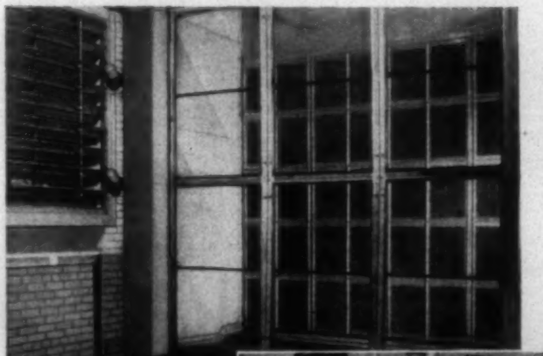
YOU CAN'T AFFORD TO BE . . .

HERE'S PROOF . . .

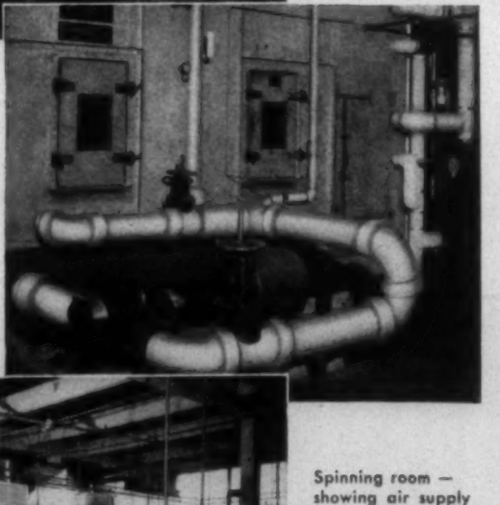
"Don't put up with dirty air, if you want to put up superior yarns" . . . recommends York Knitting Mills, Toronto, Canada, where filtering and washing air *pays off* . . . in better quality yarns! And the "Before and After" pictures reproduced above give graphic support to that advice.

An Amco central station air conditioning system delivers *only* air that's custom tailored . . . to the proper degree of temperature; to the exact relative humidity desired; and most important . . . air just as fresh and clean as a breeze off the ocean! No wonder results are uniformly outstanding . . . regain maintained; yarn counts kept more even; static electricity eliminated; closer machine adjustments and higher speeds maintained; less broken fibers, dust and fly; cleaner yarns and cloth; stronger, smoother and more uniform fabrics; greater worker comfort and efficiency — to mention a few.

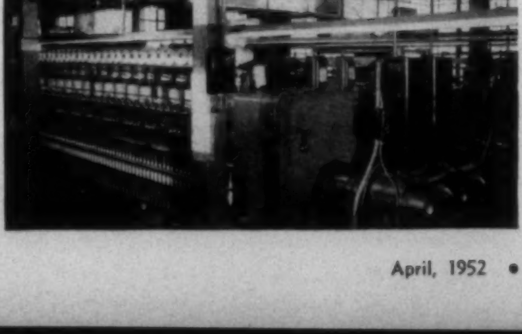
Amco has *both* duct and ductless systems — and can install humidification, evaporative cooling or central station air conditioning, alone or in combination. You can rely on Amco for impartial advice on the installation best suited to your needs. Call an Amco engineer.



Plenum chamber showing recirculating air dampers with damper motors at left; lint screens in foreground; electrostatic filter in background.



Centrifugal pump and piping which operates air washer in background.



Spinning room — showing air supply duct with atomizers over each air outlet mounted on air and water pipes.

AMCO

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Humidification • Evaporative Cooling • Central Station

AMERICAN MOISTENING COMPANY
AFFILIATED WITH GRINNELL COMPANY, INC.
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textile bulletin

VOL. 78 *APRIL, 1952* *NO. 4*

"It's A Depression, Not A Recession" Hamp Morris Tells Alabama Mill Men

THE textile industry is not going through a "mere recession," but has been and still is in the throes of a serious depression—that opinion was voiced by D. Hamp Morris, Jr., president of Geneva (Ala.) Cotton Mills, before the annual convention of the Alabama Cotton Manufacturers Association held April 3-5 at Biloxi, Miss.

Mr. Morris, retiring president of the association, declared that "We most certainly are in more than a mere recession today in the face of high general business activity and a pretty good demand for materials from the government with cotton goods prices so low. Many of us thought that such a situation with generally high employment was practically impossible, but we know now that despite this the consumption of cotton goods for this year has been lower, based on disposable income and population, than any year since 1913."

Joe L. Jennings, executive vice-president of West Point Mfg. Co., Lanett, Ala., was elected president of the association to succeed Mr. Morris. Mr. Morris becomes chairman of the board. Other new officers are T. P. Roberts of Adelaide Mills, Anniston, Ala., vice-president; A. D. Elliott of Huntsville (Ala.) Mfg. Co., treasurer.

New directors named include Claude M. Elrod of Boaz (Ala.) Mills, T. H. Floyd of Opelika (Ala.) Mfg. Corp., Burt G. Stumberg of Tallassee (Ala.) Mills, and R. Paul Clark of Standard-Coosa-Thatcher, Gadsden, Ala.

Thomas D. Russell, president of Russell Mfg. Co., Alexander City, Ala., retiring board chairman of the association, was presented the "past president's trophy" at ceremonies highlighting the annual banquet. Presentation of the trophy was made by the new president, Mr. Jennings.

Discussing the status of the industry in general, Mr. Morris cited the tax rate problem as being of immediate concern, declaring it had reached the point of diminishing returns and was one of the main causes of the present dilemma.

"And still our government is not satisfied with the amount of taxes we are paying and wants an 85 billion dollar budget. Although I know that you all have heard this, it is certainly worth repeating and that it is in the last six years we have paid the Federal Government a total of 260 billion dollars, and that is more than the total amount that was paid in the first 156 years of our nation's existence. We certainly need to stop and think and look around and see whether we are getting our money's worth. "There is one thing certain, though, and I might add it is small recompense to us, that the bulk of the load is going to have to be paid by the wage earners and salaried workers and businessmen in other industries, for I am sure that if the textile business continues in its present state, and if your profit and loss statement looks like ours, the government is going to get very little income taxes from the textile industry in 1952," he declared.

A cautious note of optimism was sounded by Robert C. Jackson, executive vice-president of the American Cotton Manufacturers Institute, guest speaker before the Alabama group.

Mr. Jackson cited figures indicating that department store inventories are down to a reasonable basis, and remarked that these retailers have just come through a difficult situation and it was not to be expected that they would engage in a sharp upswing of buying in the near future because of their recent experiences.

He offered the opinion that the industry is better off, in the long run, to have business on an even keel, rather than to have such big buying bulges as marked the period that followed Korea, and the first two months of 1951.

"The factors of inflation appear to have lost their forward drive and for some time have served only as sustaining forces," and here Mr. Jackson cited the Bureau of Labor Statistics data, on the sharp declines in prices of wool, aluminum, tin, hides, skins and leather products, etc., from a year ago.

Considering the condition of the textile industry today from an international viewpoint, Mr. Jackson stated that the United States' industry is suffering less than most other countries, although price-wise we are in equally bad plight.

Mr. Morris struck out at what he termed government discrimination against the Southern textile industry.

"We are all familiar with many things which our government in Washington has been doing to discriminate against our section and particularly our industry. For instance, about two months ago the Office of Defense Mobilization issued an order which would channel textile orders to areas where there is unemployment by arbitrarily awarding contracts at higher prices to companies in those areas under the guise of using surplus manpower. The American Cotton Manufacturers Institute is leading in the fight against this arbitrary action, and our Alabama Association is giving great assistance in every way possible.

"Another instance which illustrates some of the things I am talking about is the effort of the government to raise minimum wages in the textile industry, under the Walsh-Healy Act. In this respect we all know that this effort is

Indulging in some monkey business at Biloxi were Mr. and Mrs. Peyton Roberts, Mr. and Mrs. Waldo Emerson, and Glenn Fisher. Glee B. Thompson *(far left)* is laughing at them.

a slap at our Southern industry. Here, too, our association is giving a great amount of factual information and personal assistance in this fight, and as you know this one is just beginning.

"Then, too, in recent days, in the face of unemployment and short-time operations so prevalent in our industry, we have seen invitations to bid come out of some of the bureaus of our government, namely: Marine Corps and Corps of Engineers, specifying their preference for burlap and jute in the supplying of their needs. Such discrimination is seriously affecting the operation of our Southern textile mills and it is impossible to pay American wages and compete with burlap and jute produced in India and Pakistan, which is indiscriminately being dumped on the American market. In order to solve this problem it is necessary to combine our efforts with such organizations as the National Cotton Council and the American Cotton Manufacturers Institute, in order to work out a satisfactory solution for all concerned.

"And, of course, I am sure you all are equally familiar with the efforts being made to get O.P.A. to decontrol prices on textile products so that there can be a return of some stability to our prices and remove a lot of unnecessary and costly red tape in the textile industry. Here again we see how hard it is to pry loose from the clutches of bureaucracy when they once get you, for all that has been gained by the efforts of all of our associations has been a promise to do something about it.

The tenth anniversary of the safety program of the Alabama Cotton Manufacturers Association was celebrated with Hugh Comer, prime sponsor, as the principal speaker. The chairman of the board of Avondale Mills, Sylacauga, reviewed what increased attention to safety on mill jobs meant.

Gurney Mfg. Co., Prattsville, and Tallassee (Ala.) Mills were declared winners of the statewide textile safety contest. The Comer Textile Safety Trophies were presented by Joe L. Coleman, director, Department of Industrial Relations, State of Alabama.

Second place, in spinning and weaving, went to the Julia Cade Mills of Elberton; and third place to Huntsville (Ala.) Mfg. Co. Second place in the spinning division was won by the Linen Thread Co. of Blue Mountain; and third place in spinning by Standard-Coosa-Thatcher Co. of Piedmont, Ala.

George Coker of Wehadkee Yarn Mills, West Point, Ga., scored the low gross for members and Russell Gill of Southern Sizing Co. of East Point, Ga., registered the low gross for suppliers at the annual golf tournament. Mr. Coker's score was 87-14-73, and Mr. Gill's, 81-9-72.

Other prize winners were: Nat Davidson, West Point Mfg. Co., second low gross, members, 89-14-75; Ben Gifford, Pepperell Mfg. Co., low net, members, 111-39-72; John Lindsey, California Cotton Mills, Uniontown, Ala., second low net, members, 101-27-74; L. S. Selman, Jr., Mill & Textile Supply Co., Birmingham, second low gross, suppliers, 83-9-74; Boyce Estes, Clinton Foods, Inc., Atlanta, low net, suppliers, 103-31-72; Davis E. Williams, Belton C. Plowden, Griffin, Ga., 86-14-72, and Herman Baker, Corn Products Sales Co., Memphis, closest to No. 8 hole.

Presentation of prizes was made at the organization's banquet by Robert Rearden of West Point Mfg. Co., Langdale, Ala. Co-chairman of the golf committee was Harold M. Clark, Avondale Mills, Pell City, Ala.

Performers at the Linthead Circus staged Thursday evening during the meeting of the Alabama Cotton Manufacturers Association at Biloxi, Miss., included *(left to right)* Russell Gill and Mrs. Gill, Erwin R. Lehman, Sidney Jay and Mrs. Jay, Mrs. Robert Reardon, Mrs. Frank Williams and Mr. Williams, Mr. Reardon, Mrs. Herman Jones and Mr. Jones, Bill Dulaney and Mrs. Dulaney. The Jays won first prize, and the Dulaneys were awarded second prize.

Balance Agriculture With Industry . . . Sure, But It Seems To Lean A Little To The Left

By EUGENE MILLER

TODAY many Southern textile manufacturers are worried over a new type of business threat—one they believe may do serious harm to the state's textile industry unless it is checked.

The threat comes from a program called B.A.W.I. (Balance Agriculture With Industry), which started in Mississippi in the 1930s and has now spread its roots to Kentucky and Tennessee. Alabama, California, Illinois have somewhat similar plans and Massachusetts and Rhode Island are now eyeing the B.A.W.I. plan eagerly.

In essence, B.A.W.I. was first started to promote industries in states which were long on agricultural workers and short on industries. To encourage new plants to locate in their respective states, special B.A.W.I. legislation was passed to permit cities and counties in the various states to issue bonds to build industrial plants—and in some cases to buy machinery—to rent to manufacturing firms.

The company which occupies a B.A.W.I.-financed plant and uses B.A.W.I.-financed machinery pays off the principal and interest on the municipal or county bonds through yearly payments of rent.

The advantage to the city involved is that it acquires a new industry and with it a fat industrial payroll.

The dangers, according to leading North Carolina textile industrialists are many.

First of all it has been attacked as a tax dodge by which municipalities sell their co-operation to a private business for the advantage of both the city and the private industry.

Since the city or county owns the plant, the firm does not have to pay city or county taxes. In addition, by renting the plant facility the private industry can deduct its whole rental expense as a business expense before taxes. If it built its own plant it could only deduct depreciation on the building as a business expense—and this usually is only two per cent of the cost of the building per year.

Secondly, B.A.W.I. has the added danger of getting some municipalities and counties hopelessly in debt. For example take the city of Elizabethton, Tenn.

Elizabethton has already issued $26,000,000 worth of bonds to finance industrial plants, and reports are that the city is contemplating issuing an additional $25,000,000 in bonds. That would give the 10,000 Elizabethton residents a bond debt of at least $51,000,000.

And what would happen if an unscrupulous firm would move into an Elizabethton plant and then move out a few years later, is something rather terrifying to imagine. Who would pay off the bondholders, or would they be forced to take liens on all the property in Elizabethton?

A third main argument against B.A.W.I., especially now when federal taxes are taking huge bites out of company earnings is the fact that companies operating B.A.W.I.-financed plants have very extraordinary tax advantages.

For example, because interest on municipal and county bonds is exempt from income tax, these B.A.W.I. bonds can carry an interest rates as low as two per cent and get plenty of buyers. However, if a private firm wanted to issue its own bonds to finance construction of a new plant, it would have to issue at least four per cent bonds because these bonds would be subject to federal taxes.

A tax expert in figuring the operations of an $8,000,000 cotton mill financed by B.A.W.I. as against the same type mill built under the private enterprise system, came to the conclusion that a B.A.W.I. plant had to make 2.4 per cent profit on sales to be able to break even on operations and stay solvent.

A privately-financed plant, on the other hand, would have to make 4.36 per cent on sales to break even and stay solvent.

It's this last feature which has a great many textile executives up in arms. Right now the textile industry is in a slump, hampered by high taxes, price controls, and by fierce competition for government textile contracts.

Multi-million dollar contracts today can be won or lost by bids that are only a fraction of a cent per yard apart. In such a situation, the competitive advantages of a B.A.W.I.-financed plant might spell the difference between a busy plant, humming with activity, and a shutdown mill, its workers on relief.

That is why such textile leaders as Herman Cone, president of Cone Mills Corp. of Greensboro; J. C. Cowan, Jr., president of Burlington Mills Corp.; William Ruffin, president of Erwin Mills, Inc., and Robert Stevens, chairman of the board of J. P. Stevens & Co., take such strong stands against B.A.W.I.

While their attention is mainly on the effect B.A.W.I. will have in the textile field, they are quick to point out that while today B.A.W.I. may be hurting the textile industry, tomorrow it may be a threat to the furniture or steel industries.

Here's the way Herman Cone analyzes the problem:

"In my opinion there are two very serious competitive implications that those of us with our own plant facilities will have to meet in this type of plan. The first of course is the fact that securities issued by such municipalities or counties will command a lower interest rate due to their income tax free features as against the interest rate on bonds that might be issued by corporations for plant facilities.

"The second feature is the fact that rent paid by a corporation occupying such facilities in sufficient amounts to fund such bonds would be an expense item before income taxes, whereas a corporation could only fund the principal of any of its bonds outstanding before income taxes to the extent that depreciation write-offs are allowed.

"We can anticipate that this method of financing plant facilities will be very attractive to new businesses or to old businesses that are looking for new plant locations, either for expansion purposes or where a move from their old locality is indicated for some reason.

"The broader implications of such legislation would indicate an expansion to other states as competition for industrial development continues. Eventually old businesses which do not want to move away may be forced by competition to ask their own cities or their own counties to undertake such financing of plant facilities that have heretofore always been considered to be proper sphere for free enterprise.

"We like to feel that our own company, with a large stake in this community, has always been a willing taxpayer, and has been treated accordingly by the taxing authorities of the city, county, state, and federal governments, all of whom have an important stake in the financial well being of our continued operations. Our company does not want to move its facilities from its present locations, nor does it want to have to ask its local municipal, or county officials, nor its state government to initiate the type of thing that has developed in Mississippi, Kentucky, and Tennessee. However, it is conceivable that, if this method of plant financing expands in the state where it is now legally possible and extends into other states, competitive conditions may create a situation where we must ask for similar financing in order to remain in business. The long-range implications of this system will, of course, result in all plant facilities being financed by local government authorities and will be a long way towards the road to state socialism.

"I have pointed out the dangers of this type of substitute for venture capital. I have no solution to offer except to suggest that those states that are encouraging this sort of thing are building up a Frankenstein that might well destroy that which they are trying to build up—private enterprise."

Robert Stevens, in a recent talk to his company stockholders, said that B.A.W.I. was not only a threat to the future of the textile industry but to "all industry." If allowed to continue unchecked, he said, it will have an adverse effect on private industry.

J. C. Cowan, Jr., Burlington Mills president, in an interview, scored B.A.W.I. as a "very dangerous thing, unsound, and contrary to the free enterprise system."

William Ruffin says that B.A.W.I. makes for "extremely tough if not impossible competitive conditions, especially for firms with large fixed investments."

Here are the three possibilities suggested by one North Carolina textile manufacturer. He lists these three courses of action:

(1) To have B.A.W.I. outlawed in the states where it is now operating.

(2) If that fails to have B.A.W.I. legislation and programs established in North Carolina.

(3) If both these fail, to locate all new plants in B.A.W.I. states and to start moving present plants into these states.

Many Southern textile manufacturers have their fingers crossed hoping they will never have to use courses two and three.

DUAL JOB: Supervision & Personnel Relations

By M. V. WELLS, Industrial Relations Department

Wm. Klopman & Sons, Inc., Asheboro, N. C.

IT USED to be that a supervisor in a mill was called the boss spinner or the boss carder or the boss weaver, according to where he worked; and he was the king pin in his department. Now we call them supervisors, and I like to think that the reason a man is selected for this particular job is that he has *super* vision; he can see further than other people and can see more than they can. In England, I am told, the men in these jobs are called overlookers. That is very descriptive, I think; still it does not seem as good a title to me as supervisors.

The job of supervision is like putting together a jigsaw puzzle. All the pieces of the puzzle have to be fitted together to make the picture, and the objective of supervision is to get everything to fit in together to make a perfect whole. Good supervision is one of the most important phases of management, and one essential thing is not to let the top management forget that good supervision is important. No matter how fine a policy of philosophy the higher management may have, it can be wrecked by poor supervision; that policy or philosophy cannot be put through unless the supervisors are loyal to it and work it out. For that reason it is much more important that people like their immediate boss than that they like the company. No business today can succeed and progress any faster than the quality of the supervisors in the front ranks.

It is strange that, with all the emphasis that is put on the supervisors' role in representing management, more is not done to train them to represent it. You are told, I am sure, that you represent management and are part of management. Yet it occurs every day that we take a man who is a good fixer, who today is a production employee, and tell him that tomorrow he will come in as a supervisor and become a part of management. He has been with the company ten years, perhaps, but that is quite a transition, and I am afraid many of us fail to induct him into his supervisory duties. It may be that the very first day he is on as a supervisor another employee asks him a question about the company policy. How is he going to interpret the policy of the company when he does not know anything about it? He should be given that information and given that training; he should have all the tools he needs with which to do the job.

The people with whom we work are on three levels. First, we work with our superiors—our bosses. We know from good and bad experience that we have to get along with and please our boss. Second, we have to work, as supervisors, very closely with other supervisors. To my notion the supervisors in a plant are very similar to the bricks in a wall. There are two bricks, and they support another, and so on. In a plant, likewise, the supervisors lean upon and support each other; they strengthen each other.

But the thing I want to talk about here is the relation of supervisors to the people on the third level, the people whose work they direct. To me that is very important. Anyone who is responsible for supervising the work of others and who determines whether they shall move up (or very often out) has a grave responsibility. A supervisor's job can be fine when everything goes smoothly; but it can also be very complicated, as it is today more often than not. If we run into further mobilization and further restrictions it is going to be difficult to get people to work. For one thing, there is the demand for more money, even though the plant may be running only three or four days a week. There is also the demand for shorter hours. There will be even more problems if we get into full mobilization and wages and jobs are frozen, as they were during the last war.

I have just read a recent survey from which I want to give you a few figures, though I do not like to deal in statistics, as a rule. It discloses that 37 per cent of the employees in the industries surveyed think that wages can go up with no increase in price of the products; 35 per cent feel that it would be a good thing for government to take over certain industries; 42 per cent think that the management and the stockholders get all the profits. That boils down to us. As managers and supervisors coming into contact with the people from day to day, we have to straighten that out. We, as management people, must correct these false impressions.

To me one of the greatest needs in industry or business and our whole way of life today is understanding. In other words, I think all of us need to understand the people with whom we work, particularly those whom we supervise. One of the simplest ways to go about it (and I am sure most of us practice it) is to take an employee inventory. How are we going to improve a fellow or correct a fellow unless we can put down something definite about him? I do not know what information you have in your plants, but I am sure you have quality records and efficiency records and attendance records. From them you can get a man's attitude and co-operation. But if you want to sit down with an individual employee and give him the story of what you think he is doing and how he might improve, then you want something specific. You have to know him as an individual. Here is something we must keep in mind, too. Our fellow employees are making a study of us. If you want to find out about a boss, go to the fellow that works under him, because that worker studies his boss from day to day. So I think we should study our people as individuals, not with the idea of trying to get rid of certain ones but with the idea of helping them, and where they need help we have to support them.

Coming down to a question, what do employees really want, as a usual thing? You say that something is cropping up all the time and they want all sorts of things. But what do they really want? Let me give you some results from a recent survey. One of the first things that comes out in most of the surveys I have seen is that the thing that means most to the rank-and-file employee is day-to-day contact with the boss—with his immediate supervisor.

I was in a meeting the other day where we had a bunch of what we call pre-supervisors. Some of them were men who are working out in the plant as loom fixers, some were boys from college who are studying there, and so forth. We meet with them from week to week. I asked the question, what qualities go to make up a supervisor? A man in the back, who must have had a rough time in his day, said: "Two qualities. He has to know how to set a loom, and he has to know how to raise hell." That served to lighten up the meeting a little bit.

A man wants fair and consistent treatment. People like supervisors to be fair but firm. The better employees like discipline; but they want fair treatment, not based upon the whims or the feelings of the supervisor. I was not raised in a textile area, at all; I was one of those Okies who went East. I got a job in a textile plant, and it happened that I lived with the boss spinner. When I would go to work in the morning the other employees would ask: "How is Mr. Jones feeling this morning?" I thought at first they were interested in the boss spinner's health, but after I had been there a week or so I found they were interested in which way to scatter.

I think one of the most important things in dealing with men is never to let an employee see you out of humor. You may say that is impossible. Now, suppose a man comes up and asks you for something and because of company policy you have to refuse it. If you are in a bad humor and show it that man will think: "Well, I just caught him on a bad day"; and the word will get around that if the boss is mad about something nobody had better say anything to him. I was working in one plant where a man said to me: "Boy, is this going to be a rough day for you!" I asked why. He said: "This is Wednesday, the day for the overseers' meeting. The superintendent lays it down the line to them for an hour, and then they come out and get after the second hands, and it goes on down the line. You are the low man in here, and oh boy, will you get it!" (Of course, that does not happen in *your* plant.)

When I got to be a supervisor I fixed myself up a little sign—"Do it with a smile." And do you know where I put that? On the back of the office door, where I would does not matter what you are going out for, just keep a smile in your voice. Dealing with employees is much like dealing with children. Someone told me once: "If you are angry, don't call your children. They will detect the anger in your voice. Whistle for them, instead, because you can never whistle if you are mad." You might try that out. In other words, if you feel that you are losing your temper, try to whistle; and if you cannot whistle then I would say don't talk to the employee right at the moment who is concerned in the matter. Give yourself time to calm down, and don't let him see that you are upset or mad.

In order to get better work we have to create interest in the job. You may say that is rough. If a man has a repetitive job like quilling and is performing the same operation day after day and week after week, how are you going to keep up his interest? How are you going to make it interesting to him? Well, I don't know; that is a problem. I don't know how to fix a loom, either, and that is a problem. But we have to do something to keep that fellow interested in the job. It has been said that one way is to tie in the end product, to let him know what he is working for. Another way is to let him feel that he is participating—go to him and discuss problems with him and get his ideas. If you do not show some interest in a man's ideas, he will not care so much about the work.

In the final analysis, the success of an organization can not be bought with wages alone. There are only three things we can buy from our employees. We can buy eight hours per day; we can buy the man's physical presence on the job; and if he is on an incentive rate we can get so many motions per unit. That is about all we can buy.

There are a whole lot of things we cannot buy from our employees, and yet we can not succeed without them. The first is loyalty. You can not buy a man's loyalty. Nor do I think you can buy his co-operation. You may say: "I can slip him a couple of bucks, and that will keep him on the right road." But if you do that he will swear the other man got three, and you will be worse off. You cannot buy his confidence, his respect, his enthusiasm for the job. Suppose you are supervising 15 employees and you have a problem to lick and you go to them and tell them what you think of doing. Whatever it is, you know there will be some that will be opposed to it. The rest of them will be anxious to get at it. We cannot buy that enthusiasm; we cannot buy that enthusiastic support. Neither can we buy dependability, and we cannot buy interest in the job and pride in the job.

How are we going to get these things? I think it has to start in yourself; you have to have a desire for them. Suppose you think you may want to trade cars; when you drive down the street you cut your eye over at the new cars in the dealer's display window, but you do not go in and trade until you have a real desire for a new car. Then you finally go in and trade, and you swear that you got a good deal. So we have to create desire for the job.

Next, we have to earn these things from our employees, and we have to deserve them. Once you earn a man's confidence you have to deserve it in order to keep it. Otherwise it is like picking up a handful of sand; you are going to lose it, because it will slip away from you. You have to work to maintain that confidence in you; you have to work harder to maintain it than you did to get it. Then, when we have these things, let's show our appreciation. The thing that I continually bring up to supervisors and that makes sense to me is this. You go along and you have about 95 per cent stable people, and most of your problems are concerned with the other five per cent of your people. Those are the ones that quit; they are the ones you lay off or discharge; you have all your turnover in that five per cent; and maybe today you spend more time following up that five per cent than you do the 95 per cent. You tend to overlook the fellow that you can depend on, that you know is going to come in. But let's show our appreciation; let's give that 95 per cent some consideration and some time.

The foregoing remarks of Mr. Wells were delivered by him at Raleigh, N. C., March 8 before the Eastern Carolina Division of the Southern Textile Association.

Price Control In The Textile Industry Is Like The You-Know-What At A Family Reunion

MENTION the words price control to a Southern textile manufacturer and his hair literally stands on end—and rightly so. For the past several months Southern mill owners, struggling to get their industry out of a serious depression, have been waging a vigorous campaign to eliminate price controls on textiles. And just as vigorously, the government and "red tape" men are fighting to retain them.

The criticism, the Southern textile industry levels at Office of Price Stabilization controls on textiles breaks down into four separate categories:

(1) Controls on textiles are not needed because mill goods are now selling at 25 to 30 per cent below ceiling prices.

(2) The O.P.S. price control program for the textile industry is costing the government hundreds of thousands of unnecessary dollars to maintain special staffs and experts.

(3) Price control is costing the textile industry millions of dollars for special accounting, legal, and statistical work needed in connection with compiling required tables and making required computations for the O.P.S.

(4) O.P.S. price controls on textiles are confusing the textile industry and hampering it from getting out of its present depression and back on its feet.

Here's the way Southern textile leaders feel about price controls on textiles:

Robert C. Jackson, executive vice-president of the American Cotton Manufacturers Institute which represents some 90 per cent of the industry, says that the "confusion and uncertainty" stemming from controls is making it "extremely difficult for the industry to readjust itself."

This readjustment requires "experience, judgment, and above all it requires flexibility—pliability—freedom. All of these are denied in at least part under controls," Mr. Jackson claims. An almost "endless stream of orders regulations, interpretations, revisions and contradictory orders from O.P.S. have deluged the industry, Mr. Jackson says.

Roger Milliken, president of Deering, Milliken & Co. which operates mills in the Carolinas and Georgia, says: "Controls are obviously unnecessary in this industry."

Noting that the administration is asking Congress to appropriate $150,000,000 for E.S.A.-O.P.S. controls during 1952, Mr. Milliken says: "Controls have often been called a necessary evil, but if they are no longer necessary, they are only evil, and at that figure they are pretty expensive.

"The effect of the bewildering O.P.S. orders and regulations on the textile manufacturing industry has been to smother sales, cause the sharpest decline in profits of any major industry, and force production cutbacks and unemployment," he said.

Mr. Milliken charged that O.P.S. "red tape" was costing the textile industry millions of dollars annually in extra bookkeeping and legal fees, exclusive of lost salary time. "These needless expenses are also costing the government thousands of dollars in tax losses in this industry alone and for industry, it undoubtedly runs into millions," he added.

William A. Ruffin, president of Erwin Mills at Durham, N. C., points out that price controls exert a "deadening influence." He added that the process of adjustment with respect to rebalancing supply and demand in the industry is one involving the entire relationships from the origin of the raw material to the destination of the finished product.

"Under price controls which press in varying degree and effect upon the merging points of the whole system of relationships, the pliability necessary to adjustment is denied and, in the resultant confusion and uncertainty bred by controls, creates a poisonous psychological effect that is American psychology in reverse.

"Confidence is turned into doubt; courage becomes fear; resourcefulness is replaced by caution; planning is turned into waiting; the taking of normal business risks gives way to drawing in of committments, the sense of freedom is thwarted by a feeling of imprisonment. The dynamic motivation which is the very essence of business progress is stifled."

Basil Browder, vice-president of Dan River Mills, Danville, Va., adds that "price controls are obsolete." The textile industry is in its worst shape since the 1930s, he points out. "It's silly to have controls when goods are selling 'way below ceiling prices. I wish we could just get the ceiling price for some of our goods."

What do price controls cost the government? Here's the dollars and cents answer prepared by the O.P.S. itself. The O.P.S. states that the approximate cost for the government operation of textile controls during 1952 will be $629,279. Of this total, $232,865 will be spent to maintain a staff of 41 government workers in Washington, including seven lawyers. The remaining $396,414 will be spent to maintain 85 field O.P.S. workers, including nine lawyers.

Price operation of the Atlanta region office of the O.P.S. with nine employees, alone totals $52,045. This office includes Georgia, South Carolina, Mississippi, Tennessee, Florida, and Alabama.

What do price control computations and paper work cost an individual mill? That's a hard question to answer, textile executives readily admit, because part of the costs—the time and energy top management must spend on O.P.S. problems—is hard to estimate.

The expenses are divided into two main categories: internal, which includes the work of company personnel, legal and accounting staffs, trips and phone calls to O.P.S. offices, and external, which includes fees paid to outside legal, auditing, and accounting firms.

One of the largest mills in the country, located in North Carolina, estimates it spent a flat $100,000—exclusive of top management expenses—in 1951 computing O.P.S. price control data. A small mill in the state with 1,800 workers and 95,000 spindles estimates it spent $2,575 for price control work during the past year. The breakdown is: accounting, $1,800; legal, $200; phone, $75, and auditing, $500.

A small firm in the Deep South with 34,000 spindles and 830 employees, reported that it spent $10,750 in 1951 figuring price control data. The breakdown was: accounting, $6,000; travel, $600; telephone, $150; legal, $1,500, and outside auditing, $2,500.

Another mill with 152,000 spindles and 4,400 employees reported spending $24,000 during 1951. The breakdown was: accounting, $8,000; telephone, $500; legal, $500; outside assistance and sales staff time, $15,000.

Another estimate is from a mill with 42,000 spindles and 900 employees. It cost them $8,235 for O.P.S. work in 1951. The breakdown here was: accounting, $1,170; travel, $185; tlephone, $75, and legal, $6,805.

A large mill with 425,000 spindles and 7,000 employees estimated it spent $60,000. Internal administratitve costs amounted to $50,000, and advisory costs to $10,000. This was a very conservative estimate, company officials noted.

One textile manufacturer had this story to tell about O.P.S. controls. He said that the controls office has asked his firm to help get up some statistical data for the O.P.S. to help determine a ceiling on a certain fabric.

In order to get up the O.P.S. data, the company president estimated it would take 1,900 man-hours, or 50 people working for a week.

He wrote the O.P.S. office that he frankly couldn't understand being asked to undertake such expense when the industry was in a depression. "My organization should be busy stimulating new business activity instead of incurring needless and unnecessary expense," he wrote.

Another manufacturer reported that his firm made three separate calculations on more than a thousand items—all to find their work useless and obsolete because O.P.S. later changed its pricing regulations.

FIBERGLAS COMES TO TOWN

THE city of Anderson, centered in a thriving industrial and agricultural area in northwest South Carolina and northeast Georgia, was chosen as an ideal site for the new Fiberglas yarn plant after an extensive survey of locations throughout the country. Advantages of the Anderson area, cited by Harold Boeschenstein, president of Owens-Corning Fiberglas Corp., include: an adequate supply of the natural gas needed for uninterrupted year-round production; proximity to many textile firms who are actual or potential Fiberglas yarn customers, and an outstanding community of men and women residents from whom to select the plant's working staff.

The Anderson Fiberglas yarn plant was designed by Lockwood Greene Engineers, Inc., New York City and

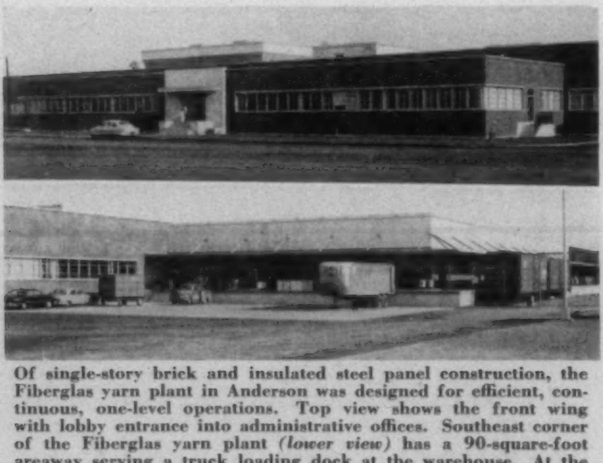
The new Fiberglas yarn plant in Anderson, S. C.—world's largest, most modern of its kind—is situated on a 134-acre plot south of the city. Volume production in the plant will help assure adequate Fiberglas yarn supplies during 1952.

Spartanburg, S. C., and built by the Daniel Construction Co., Greenville, S. C.

The new Fiberglas yarn plant—extensively air conditioned—is of single-story brick and insulated steel panel construction and has 265,400 square feet of floor space. It is situated on a 134-acre plot on State Highway 81, four miles south of Anderson.

Designed and built for maximum efficiency, with continous, one-level operations. The plant proper—covering production, service, shop and warehouse areas—is near-square in shape, with a notched-out southeast corner. It is 430 feet wide by 450 feet deep, with the 90-foot square notched area for truck loading. Extending across the westerly front of the plant is a 45 by 210-foot section housing administrative offices and the main lobby-reception entrance. Entrance is through a 12-foot wide expanse of aluminum-framed glass doors set in a facade of Georgia limestone.

From ground level, the plant proper is 23 feet high to the top of the facia in all sections, except for a 40-foot high furnace hall area, 100 feet wide by 360 feet deep, which extends from the rear of the plant along the north side. The entrance-office section is 17 feet high. Adjacent to the Fiberglas yarn plant on the north side are power and batch houses. Back farther from the same side are the pump house and spray pond for cooling water used in the plant; also, equipment and storage tanks for propane gas, available as a stand-by fuel.



Of single-story brick and insulated steel panel construction, the Fiberglas yarn plant in Anderson was designed for efficient, continuous, one-level operations. Top view shows the front wing with lobby entrance into administrative offices. Southeast corner of the Fiberglas yarn plant *(lower view)* has a 90-square-foot areaway serving a truck loading dock at the warehouse. At the right is a railroad spur for receiving outgoing shipments of the textile yarns. There is another spur at the opposite end of the plant for incoming raw materials.

Off the northeast corner of the plant is an employees' parking lot of 250-car capacity. A smaller visitors' parking area is provided in front of the office entrance. The notched-out concrete areaway at the plant's southeast corner serves a 90-foot-wide truck loading dock at the warehouse. In addition, a railroad loading platform extends the entire 360 feet of the plant's south side. The plant is served by two railroad spurs which connect with a nearby main line section of the Charleston & Western Carolina Railroad. A single spur parallels the south side loading platform to receive outgoing shipments from the warehouse of finished Fiberglas. A double spur serves the batch house on the north side where raw materials are received and also the propane storage tanks.

A preliminary production step is receipt of selected silica sand, limestone and other mineral ingredients in the batch house at the Fiberglas yarn plant's north side. These raw materials are stored and mixed. After mixing, they move in cars on a monorail conveyor from the batch house across a steel bridge into the huge furnace hall.

Here, the mineral ingredients are melted into glass. Subsequently, molten glass flows down through tiny aperatures of bushings or feeders and the tiny streams are mechanically attenuated at high speed into exceedingly fine glass filaments. The filaments are gathered on winding mechanisms and groups of filaments then go to fabricating departments for subsequent twisting, plying and other processing into various Fiberglas yarn products.

At Anderson, the fiber forming operation will be conducted along an area of the plant's north side, extending about three-fourths of the distance from the rear. Adjacent to this forming area and covering a large central portion of the plant will be space for finishing operations on twisting frames, plying frames, roving machines, bonded cord machines, winding spools, cone winders and similar textile machinery.

The warehouse, from which finished Fiberglas yarn materials are shipped, covers 43,200 square feet along the Anderson plant's south side, opening onto canopied railroad and truck loading docks. Fiberglas yarn products are packaged in a section between the finishing area and warehouse.

The Anderson plant service and shop area is near the front of the building, between the forming-finishing departments and the administrative offices. In addition to kitchen, cafeteria, locker, shower and lavatory facilities for employees, the section includes first aid and medical examination offices. Maintenance shops, completely equipped with up-to-date tool and machine facilities, include sheet metal, carpentry, pipe, electrical and bushing fabricating shops.

The plant also has laboratories for analyzing raw materials and glass batches, maintaining quality control standards and checking physical properties of finished Fiberglas yarn materials.

Visitors to the plant may pause in the reception lobby to view displays of the multiplicity of products using Fiberglas materials. The administrative building contains offices of the plant manager and his department heads, along with departmental staffs—purchasing, service, payroll, accounting and personnel. The plant employees' entrance is at the north side of the administrative office wing and connects with a corridor to the plant proper.

The manufacture of glass products is an exceedingly "hot" operation, with temperatures well above 2,000° usually employed. At Anderson the new Fiberglas yarn plant is air conditioned throughout production, service, shop and office areas. The system will maintain the uniform temperature and humidity conditions required for conformity with manufacturing specifications, as well as provide comfortable working conditions. The air conditioning system was manufactured by Carrier Corp. Also contributing greatly to maintaining controlled inside working temperatures—in cool as well as hot, humid water—is Fiberglas roof insulation, used in varying thicknesses between the plant's pre-cast cement tile roof and asphalt built-up roof.

Water for the air conditioning system and other plant requirements is piped through a 12-inch main from the city of Anderson, four miles away. The water used for cooling is recirculated through coils in the plant's air conditioning system, various units of the process equipment and the spray pond by 60-horsepower pumps, each having a capacity of 1,500 gallons per minute. There are four recirculating pumps and two additional ones which serves as stand-bys. There is also a fire pump of 1,000 g.p.m. capacity.

In a basement area of the plant, two 500-horsepower compressors chill the water which is piped to the air conditioning coils. Spray pond water also is piped to hollow cooling panels enclosing the furnace walls. From three fan rooms on the plant roof and two in the basement, air is blown through ducts, cooled as it passes through the coils and circulated throughout working areas. Hundreds of Fiberglas Dust-stop air filters at intakes of the air conditioning system help keep the circulating air clean. Fiberglas Aerocor, which covers the air conditioning ducts, helps keep the circulating air cool and reduces noise from air passage.

Between the office and manufacturing areas of the new Fiberglas yarn plant in Anderson is a large service area which includes cafeteria *(shown above)*, kitchen, locker, shower and lavatory facilities.

Most modern, up-to-date facilities are available in the Fiberglas yarn plant in Anderson for analyzing raw materials and glass batches, maintaining quality control standards and checking physical properties of finished yarn products. Here is a section of the quality control laboratory.

In this manufacturing operation at the new Anderson plant, glass filaments are being twisted into Fiberglas yarns on a high-speed twister frame.

In the power house at the north side are two 60-horsepower compressors for process air, three 350-horsepower boilers to supply steam for heating the plant during cold spells and for process work, and a 500 KVA Diesel-electric emergency power generator. Availability of natural gas, used for production and to heat the Fiberglas yarn plant during cool weather, was an important factor in determining Anderson as the site for the new factory. This gas is piped to the plant from a main of the Transcontinental Gas Pipe Line Co., which cuts across a corner of the plant site.

Wherever they can make the Anderson plant's operation more efficient, increase employee working comfort or smarten appearance, Fiberglas materials have been used in construction. A spectacular application is the use of eight-foot-deep strips of translucent corrugated blue panels, of Fiberglas-reinforced plastic, around top portions of walls of the forming area, batch house and boiler house and across one side of the bridge connecting batch house and plant. These Fiberglas-plastic panels have an attractive exterior appearance and transmit a soft, pleasant light to the inside. Serving as a heat barrier and contributing to the plant's air conditioned comfort is Fiberglas roof insulation, covering the entire 265,400 square feet of roof area in the main plant and boiler house.

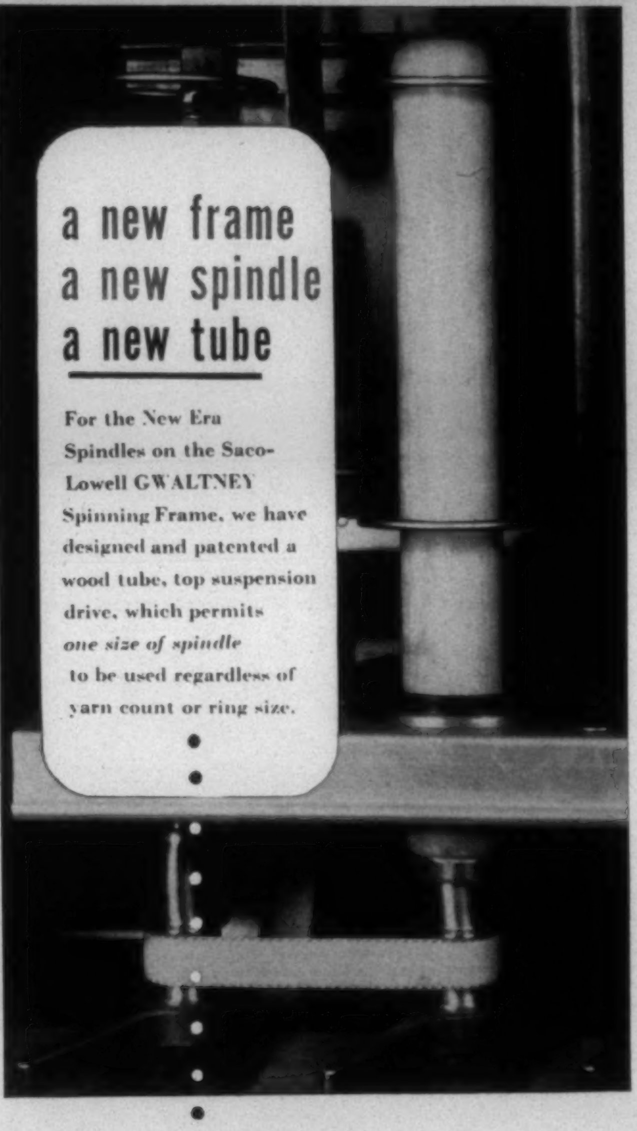
Fiberglas acoustical materials trap sound waves and contribute to a more quiet, restful, efficient work atmosphere in the plant finishing, cafeteria and office areas. In the finishing area, Fiberglas acoustical board forms a suspended ceiling over the noisiest section of this operation. In other sections, various types of Fiberglas acoustical tile are used—with perforated, natural and membrane-faced surfaces.

Efficiency of the air conditioning system in quiet circulation of uniformly cool, clean air is assured by Fiberglas materials. More than 500 Fiberglas Dust-Stop air filters trap dust particles, soot and pollen at intake sides of the conditioning system. The Dust-Stop air filters perform in banks, ranging from eight feet wide by five feet high to ten feet wide by seven feet high. The plant's air conditioning ducts are covered with Fiberglas Aerocor which serves a dual thermal and acoustical function—maintaining the chilled air at low temperature and quieting the sound of brisk air movement through the ducts.

The multitudinous end-uses for Fiberglas materials are displayed in the lobby of the new Fiberglas yarn plant in Anderson. The corrugated translucent sheet material used to frame bottom and top of the displays is Fiberglas-reinforced plastic. George S. McElroy, manager of the new Fiberglas yarn plant in Anderson, is shown *(inset)* at his desk. The draperies behind him are screen-print Fiberglas fabrics.

Fiberglas pipe insulation is used in the Anderson plant on steam and chilled water lines and Fiberglas PF insulation on steam boilers. Fiberglas PF also insulates the tanks and lines which are used for application of sizing to the glass filaments in production. Motors, generators, transformers and power lines have Fiberglas-base electrical insulation. Under gas distribution lines, connecting with the Transcontinental main about 500 feet from the plant, are protected against corrosion by spiral wrappings of Fiberglas Coromat, impregnated with a hot bituminous enamel.

George S. McElroy is manager of the new Fiberglas yarn plant in Anderson. His staff includes: Edward J. Donahue, forming manager; John J. Webber, furnace engineer; Harold E. Moss, industrial engineering manager; C. A. Spero, plant engineer; J. Ernest Craig, purchasing agent; Raymond E. Hurley, technical control manager; Owen C. Divan, service manager; W. Frederick Eprague, plant auditor; Richard W. Muzzy, cost control manager, and Hal G. Humphries, personnel manager. Harold Boeschenstein is president of Owens-Corning Fiberglas Corp. John H. Thomas, a company vice-president, is general manager of the Fiberglas textile products division.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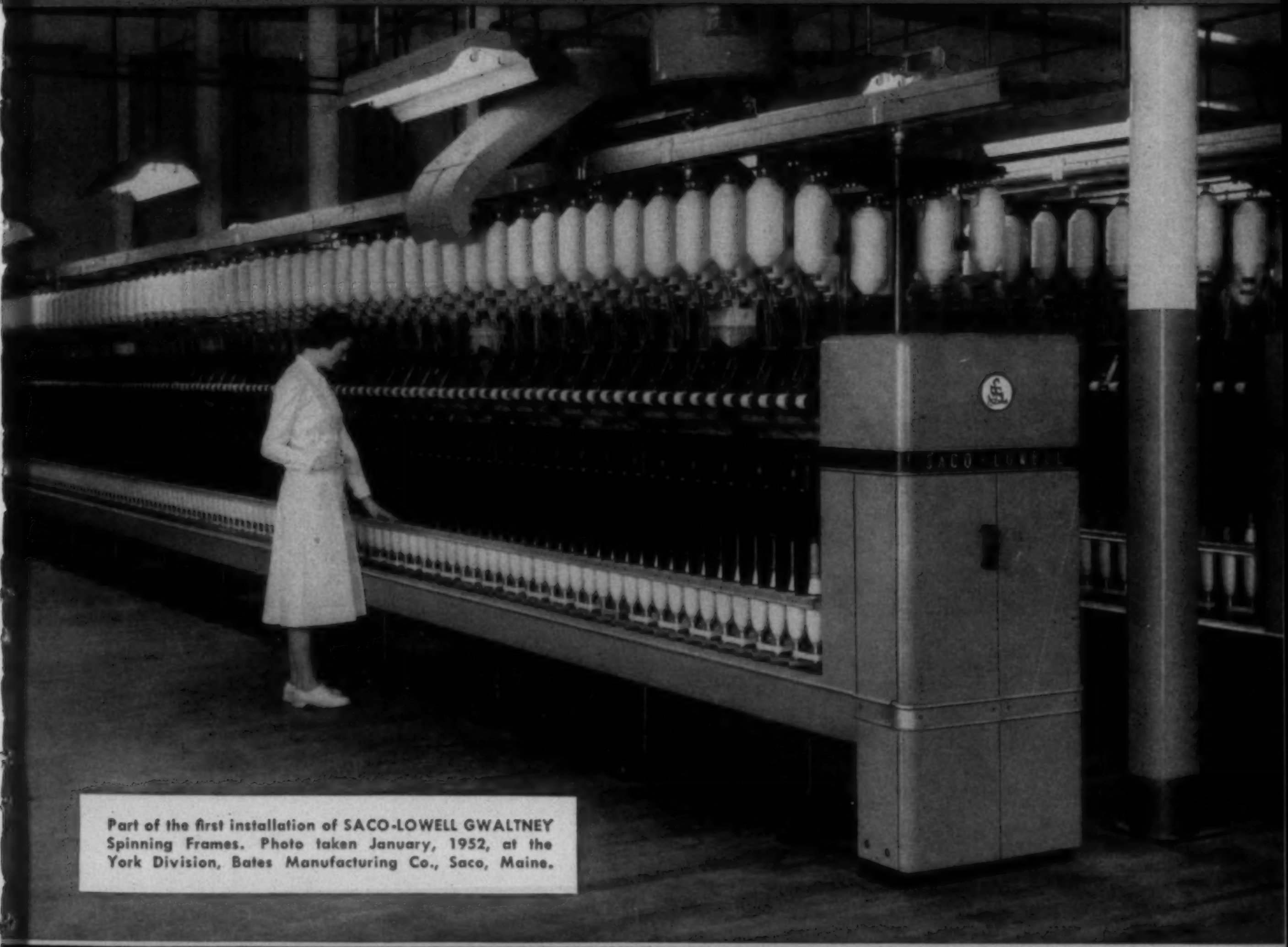

Part of the first installation of SACO-LOWELL GWALTNEY Spinning Frames. Photo taken January, 1952, at the York Division, Bates Manufacturing Co., Saco, Maine.

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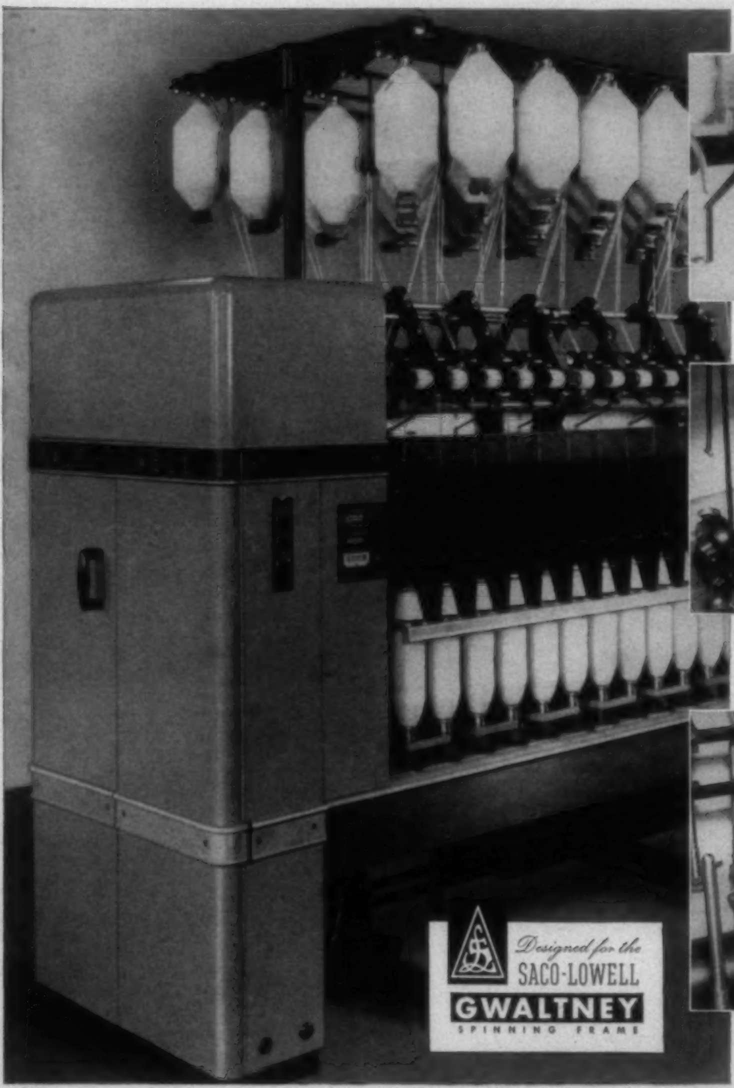

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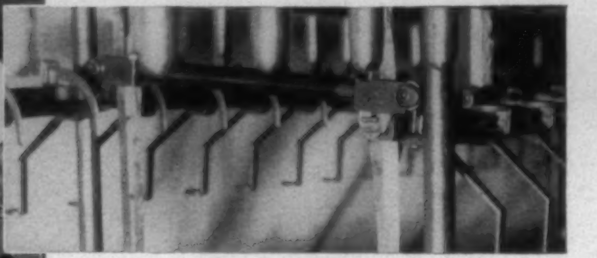

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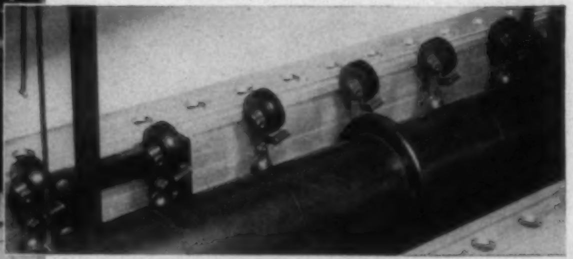

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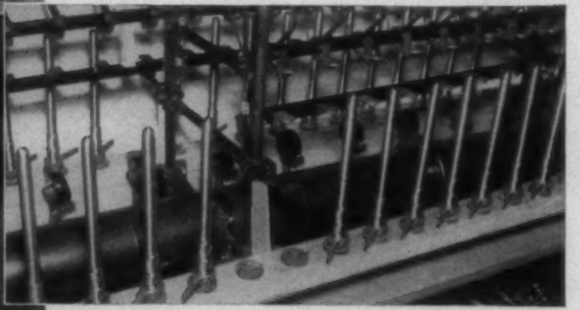

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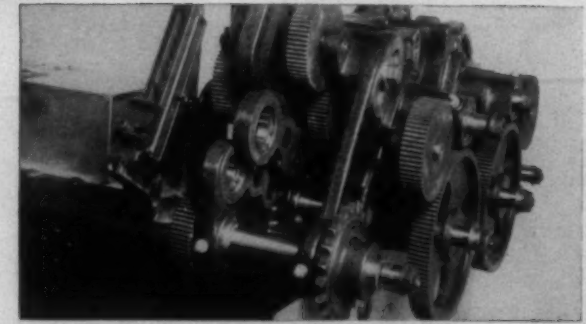

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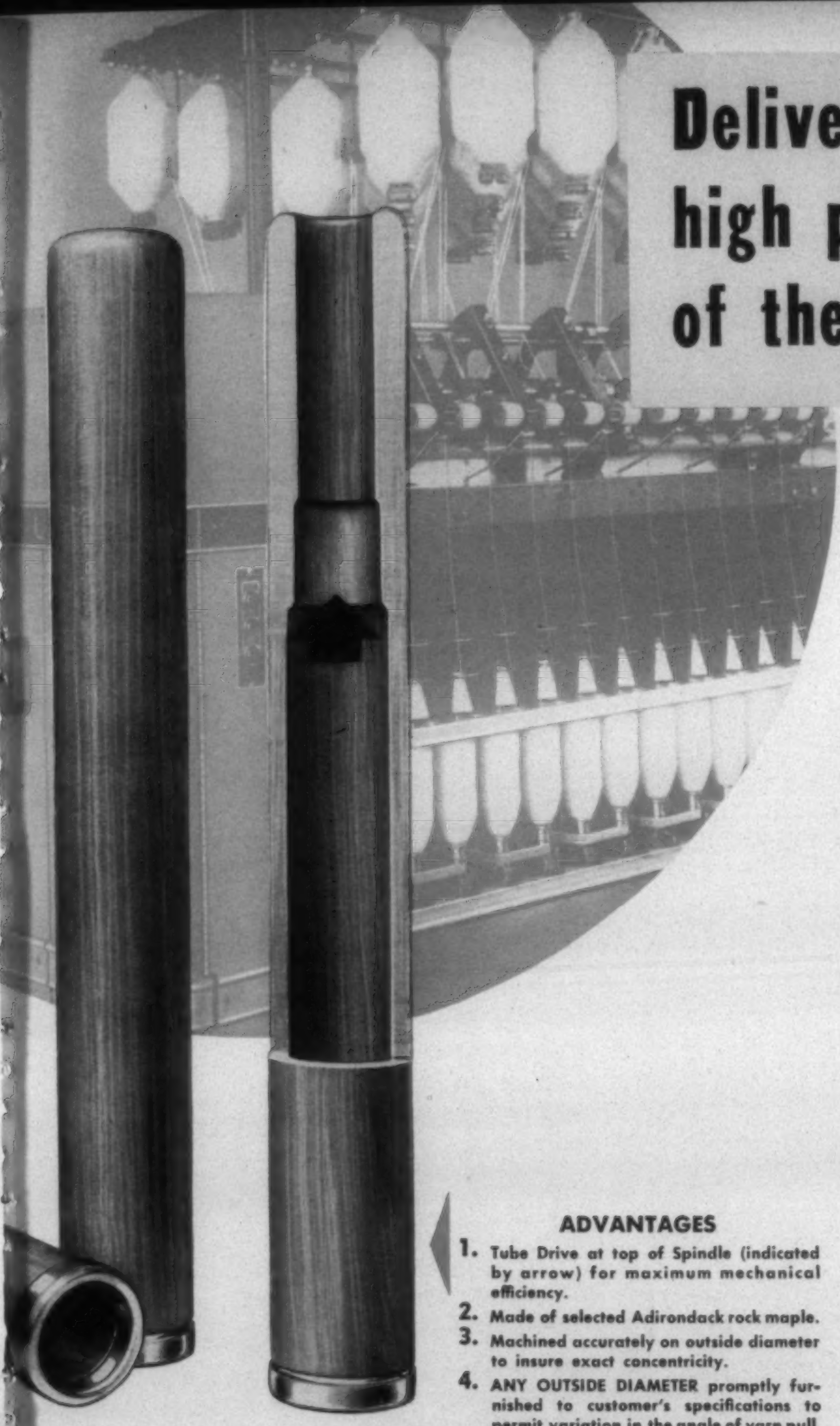

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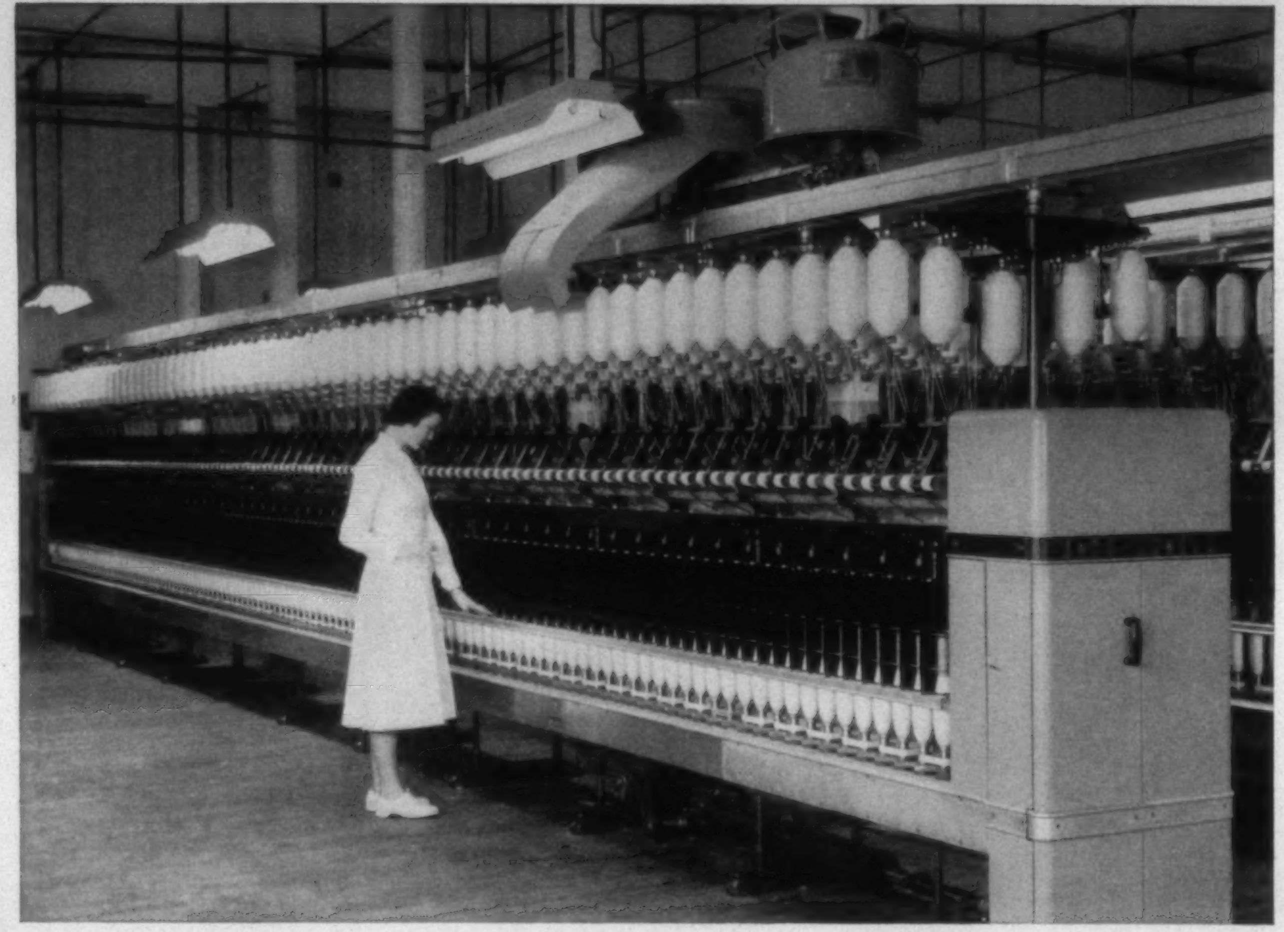

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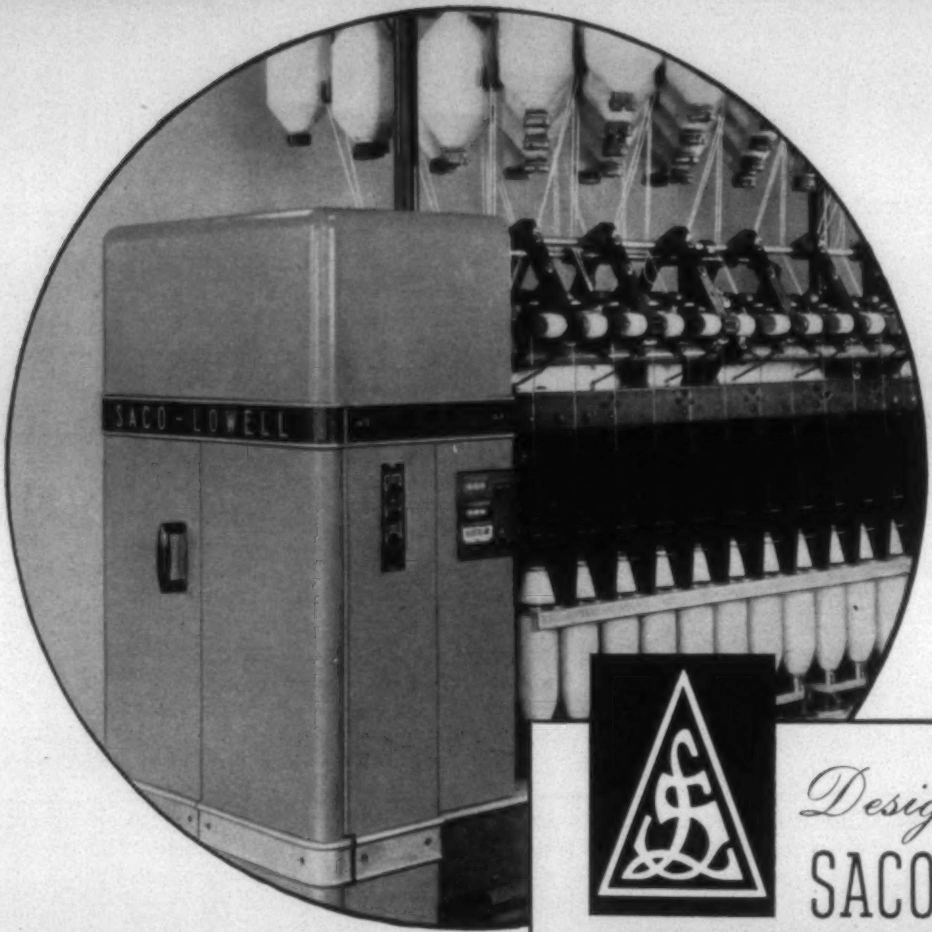

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GWALTNEY
SPINNING FRAME

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1. Absolute minimum number of parts.
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These same advantages will be found in Hyatt applications to other preparatory machinery as well as weaving and finishing equipment. Hyatt Bearings Division, General Motors Corporation, Harrison, N. J.

HYATT ROLLER BEARINGS

The Gwaltney Spinning Frame

By DAVID CLARK

I WENT to Biddeford, Me., on Feb. 14, on an invitation of the Saco-Lowell Shops, to see the new and revolutionary Gwaltney spinning frame which is said to be the first revolutionary development in spinning in over 100 years.

I spent the day with mixed feeling because I had an admiration for the brilliant achievement of a man who had been a close personal friend since our childhood days and was sad because he had died in December and was denied an opportunity to personally present and exhibit his brain child.

My relations with Eugene C. Gwaltney had always been very close because in 1874 his father, a Baptist minister, first at Hillsboro, N. C., and later at Hickory, N. C., had gone back to Hillsboro and performed the marriage ceremony for the father and mother of the writer.

While superintendent of the Bellvue Mfg. Co. (now the Gold-Tex Fabric Corp) at Rock Hill, S. C., in 1905, the writer had known and admired one of that city's most beautiful young women, Miss Marian Johnson, who had later become Mrs. Eugene C. Gwaltney.

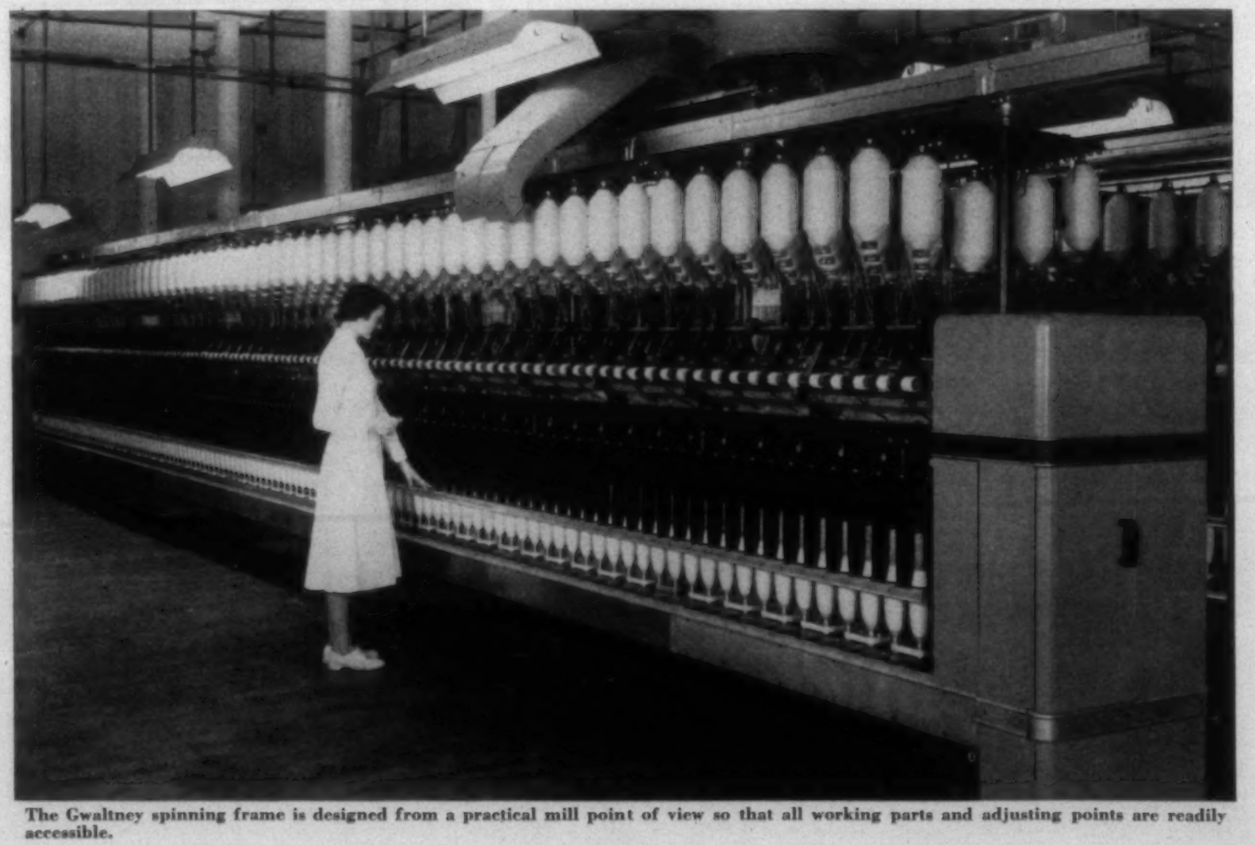
Because of the unusual personal contacts, there was a very close personal relation between Eugene Gwaltney and David Clark and whenever we met, he seemed to wish to unburden the ideas which had accumulated in his active and brilliant mind. We met at frequent intervals and Gene Gwaltney was a marathon talker. I spent many hours listening to his theories and to his criticisms of failure of the textile industry to develop new machines and new processes.

Many of his theories were over my head and I am frank to say that I did not always fully understand what he was talking about but I realized that he had imagination and enthusiasm and an overwhelming desire to do something for the textile industry. He was always contending that the regular system of spinning put too much stress upon the yarn while it was being spun and he always talked about the need for larger package spinning. That idea became of more importance to him when labor costs advanced.

It is to the credit of the Saco-Lowell Shops that they recognized the genius of E. C. Gwaltney and about seven years ago put him on their payroll and took the chance that his ideas, some of, which must have appeared freakish to many of them, would result in something worthwhile.

They took a chance and won.

I took lunch with Gene Gwaltney in Biddeford, Me.,



The Gwaltney spinning frame is designed from a practical mill point of view so that all working parts and adjusting points are readily accessible.

about three years ago and when, with his usual enthusiasm, he told me about the new spinning frame, I came away with the idea that there were still some "bugs" to be worked out.

About one year ago they put eight frames in the York Mill of the Bates Mfg. Corp. at Biddeford and after those frames had been operated under mill conditions, decided that the Gwaltney frame was ready for the market and also ready to be shown to the editors of textile journals and descriptions and details given to the public.

On the afternoon of my visit to Biddeford we were taken to the York Mill of the Bates Mfg. Co. to see Gwaltney frames in operation but, as luck would have it, a motor had burned out and it was impossible for them to operate that afternoon.

The best evidence of the opinion of the Bates Mfg. Co. was that they were erecting eight additional Gwaltney frames.

The York Mill employees with whom I talk were very enthusiastic about the Gwaltney frame and were very much disappointed because it could not be shown in operation.

Near the new Gwaltney frame and in process of erection was a Barber-Colman spooler and winder which I was informed was a new design which could handle the large bobbins of the Gwaltney spinning frame.

I was interested in noting beyond the Barber-Colman machine, three Type K bobbin strippers manufactured by the Terrell Machine Co. of Charlotte.

I was also told that the York Mill also had five Terrell Machine Co. roving strippers.

During the morning of my visit to Biddeford, Me., we were taken over to Saco to see the Edwards Plant which was recently erected by the Saco-Lowell Shops, but will for several years, at least, be used for the manufacture of machine guns.

It was an immense one-story building of modern construction and beautifully lighted.

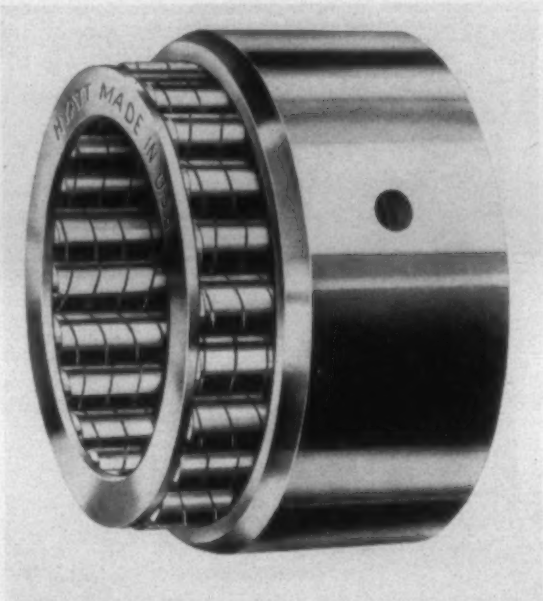
A countless number of machine tools, which had been stored since World War II, were being moved in and they expect to begin producing machine guns at a very rapid rate sometime in May.

Upon our return to Biddeford we were shown a Gwaltney spinning frame in operation.

The first thing which I noticed about the Gwaltney frame was that it was very much narrower than the spinning frames which I have been accustomed to see. I understand that five rows of Gwaltney frames can be placed in bays in which four old type frames have stood.

The second impression was that the yarn, instead of going to a guide wire and making a distinct bend before going to the traveler, went straight down. It is claimed that whereas the tension on the yarn being spun on regular frames varies 400 per cent between the roll and the traveler, it varies only 40 per cent on the Gwaltney frame.

The yarn is spun upon very much the same principle as a mule spinning frame and the node would make a figure 8 and break down if it was not for the two ring separators. Both nodes are held to approximately the same size.



This is Hyatt roller bearing used on the cylinder shaft of the Gwaltney spinning frame.

While the Pneumafil automatic waste collector has been so generally adopted by Southern textile mills that it is no longer a novelty, this was the first time that I had seen it built into a frame. The designer had done a good job and it was both neat and efficient.

The large package bobbin was plainly evident and I distinctly recalled that Gene Gwaltney had always been an advocate of the large package in textile manufacturing and I saw that he had incorporated his ideas into the new spinning frame.

One side of the frame on exhibition was equipped with wooden bobbins, the other side with "Plasti-Weld" bobbins manufactured by the American Paper Tube Co. of Woonsocket, R. I.

Realizing that many Gwaltney spinning frames would soon be in use, the American Paper Tube Co. put its expert to work to produce a bobbin especially for that frame and came up with one in which the plastic is flown appreciably further down inside the tube and a newly designed and different type of seat is used.

The Plasti-Weld bobbin is slightly tapered, 12 inches in length, measuring $1\frac{1}{2}$ inches at the base and $1\frac{5}{16}$ inches at the tip. In their opinion, the tapered shape will permit a larger package of yarn, a more uniform tension throughout the yarn and aid in high speed re-winding.

New Departure ball bearings have been incorporated at many places in the Gwaltney spinning frame. They are on the guide rolls on lift rods, on tension pulley, on the drive end assembly and in each New Era spindle. Their engineers spent much time studying the operation of the new frame and adapting the ball bearings to its operation.

Brief Description of Gwaltney Frame

Fig. 1 is a diagram of the principal winding parts. The

THE GWALTNEY SPINNING FRAME

front rolls are located at an unusually great height above the ring rail, namely, 27½ inches at the bottom position of the ring rail, which would yield a node or necked shape of balloon if the occurrence of the node were not suppressed and the balloon converted to a different shape by the movable rings which engage it at various levels. Ring 1 is a small diameter pigtail; Ring 2 is nearly as large, while Ring 3 is slightly larger than the spinning ring.

The spinning ring is traversed through a distance of 11¼ inches, and Rings 1 and 2 move, together, a distance less than this traverse. Ring 3 moves through the same traverse as the spinning ring. The diagram of Fig. 1 shows two positions of the ring rail and Rings 1, 2 and 3.

Extremely large packages are produced under economically practical operating conditions. "Ends down" are low, even in low twist operations. The tension in the spinning thread is low and the variation of tension during the doff is low. Quality of the yarn is high and can be spun with less than mule spinning twist. A single gauge of frame is commercially economical for the entire range of counts, so that a mill installing a frame for use on one count can readily convert to a much finer or coarser count.

The yarn control is revolutionary and results in a decrease in the tension on the yarn as compared with conventional spinning. More important, this tension is evenly maintained within close limits throughout the building of the bobbin and at all positions of the ring rail. The benefits of this reduced variation are manifest in many aspects. The minimum variation in yarn tension permits the use of the longer traverse, building bobbins longer than heretofore possible on a cotton type spinning frame. Traveler weights may be selected with greater accuracy to suit the yarn size because

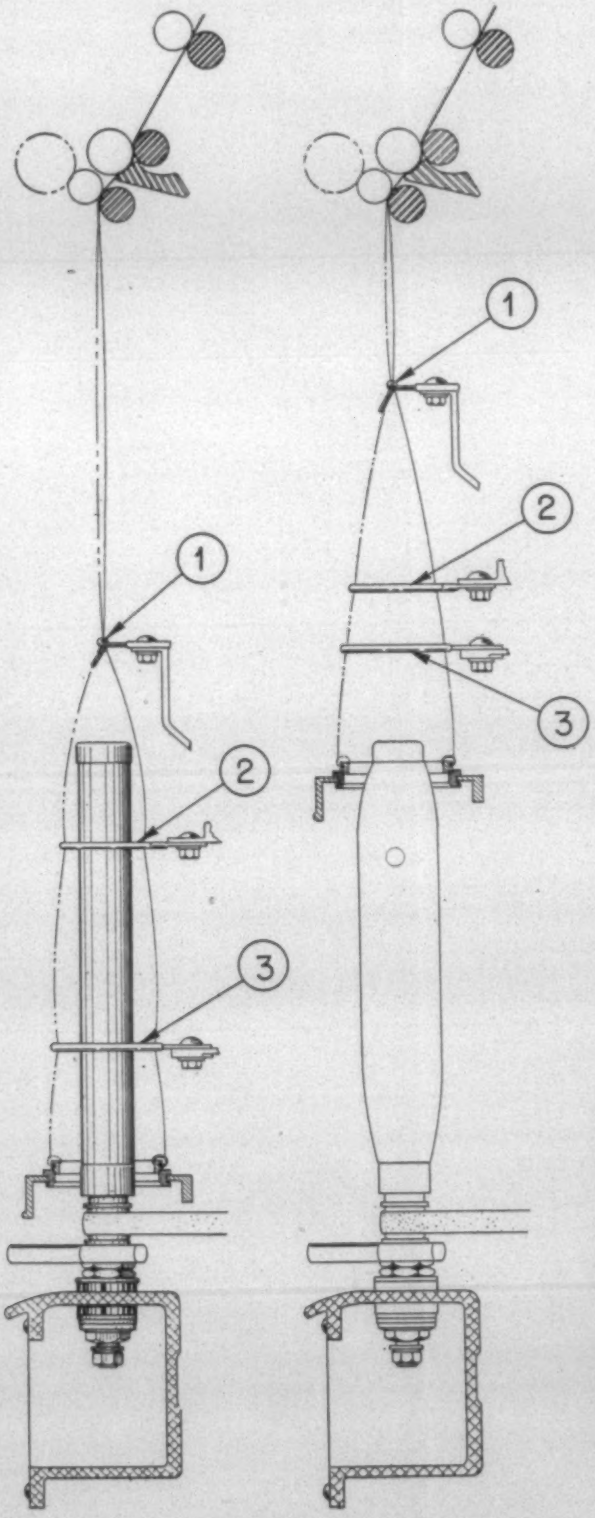


Fig. 1, showing two positions of the ring rail and Rings 1, 2 and 3.

Members of the Saco-Lowell engineering and sales force look at Eugene Gwaltney's portrait which was placed on the exhibition frame. ***Left to right:*** **W. F. Lowell, vice-president in charge of sales; Lester Pray, formerly Mr. Gwaltney's assistant and now in charge of engineering the Gwaltney frame; W. K. Dana, in charge of Biddeford sales; and R. M. Jones, director of research.**

of the more uniform conditions of tension at all points in building the bobbin. With such reduction in traveler tension and the very significant decrease in tension variation, it now appears possible to run the traveler up to 50 per cent faster and at the same time to extend its useful life substantially.

Also with the decreased and uniform tension of the traveler, larger ring sizes may be successfully used. The increase in ring size is vastly important, particularly on finer counts of yarn, as the larger full bobbin diameter permits more yarn to be put on the bobbin and increases the doffing cycle. The Gwaltney spinning frame is so designed that it seems most likely that only two ring sizes will be required to run the majority of yarn counts now spun commercially in this country. A three-inch ring is now indicated by present experiences to be suitable for the spinning of medium or coarse counts, while a 2¾-inch ring is accepted as correct for the counts ranging from medium through fine. In some special cases, for very fine yarns, a 2½-inch ring may prove desirable.

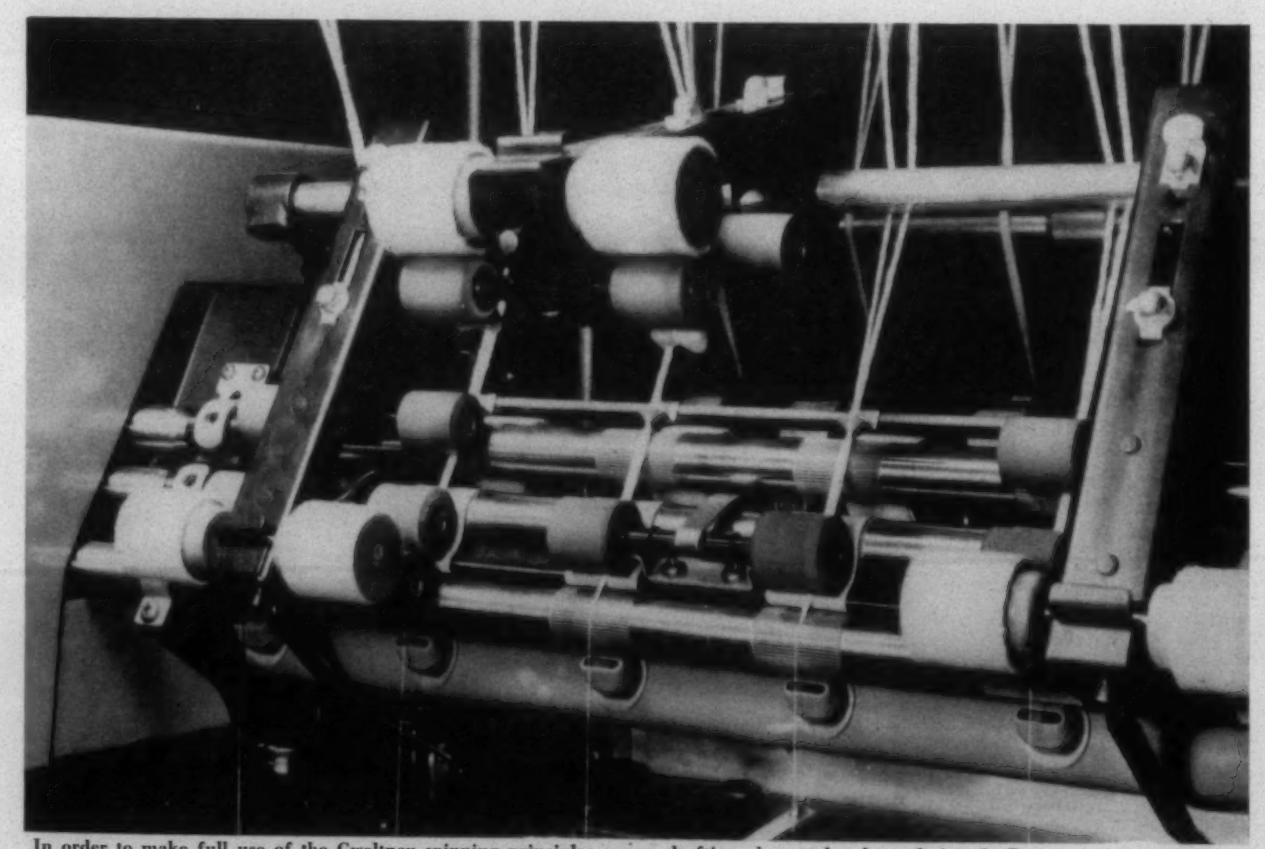
It is claimed that experience with the Gwaltney spinning frame has given convincing evidence that under average operating conditions there will be a significant reduction in the number of ends down per thousand spindle hours. The decrease in yarn tension and the absence of variation therein, together with the uniform twist distribution in the yarn, are important factors in creating better operating conditions and higher efficiencies.

Quality Is Still Paramount

Saco-Lowell has always felt that the primary importance of new equipment was an improvement in quality and not merely a decrease in cost. While reduced costs are important, the first consideration is buying yarn or cloth is still, and always will be, quality. There are numerous ways to decreases costs, but a sacrifice in quality will not allow a mill to remain competitive. They claim that the Gwaltney spinning frame offers worthwhile advantages because it is able to spin yarn of improved quality. While it is obvious that costs will be decreased, the prime importance of this new spinning frame lies in its ability to spin yarns of higher quality at lower cost. Filling yarns and knitting yarns with low twist necessary to achieve a soft and lofty hand may be produced on the Gwaltney frame without difficulty.

Major Advantages

The Saco-Lowell Shops, summarizing the major advantages offered to the mill utilizing the Gwaltney spinning frame, say that first and foremost, there will be an improved quality in the yarn which will increase machine efficiency



In order to make full use of the Gwaltney spinning principles a new drafting element has been designed. Bearings of both top and bottom rolls are of the anti-friction type to prevent oil creepage into the zone of drafting. It will be noted that the Pneumafil system is built into every frame.

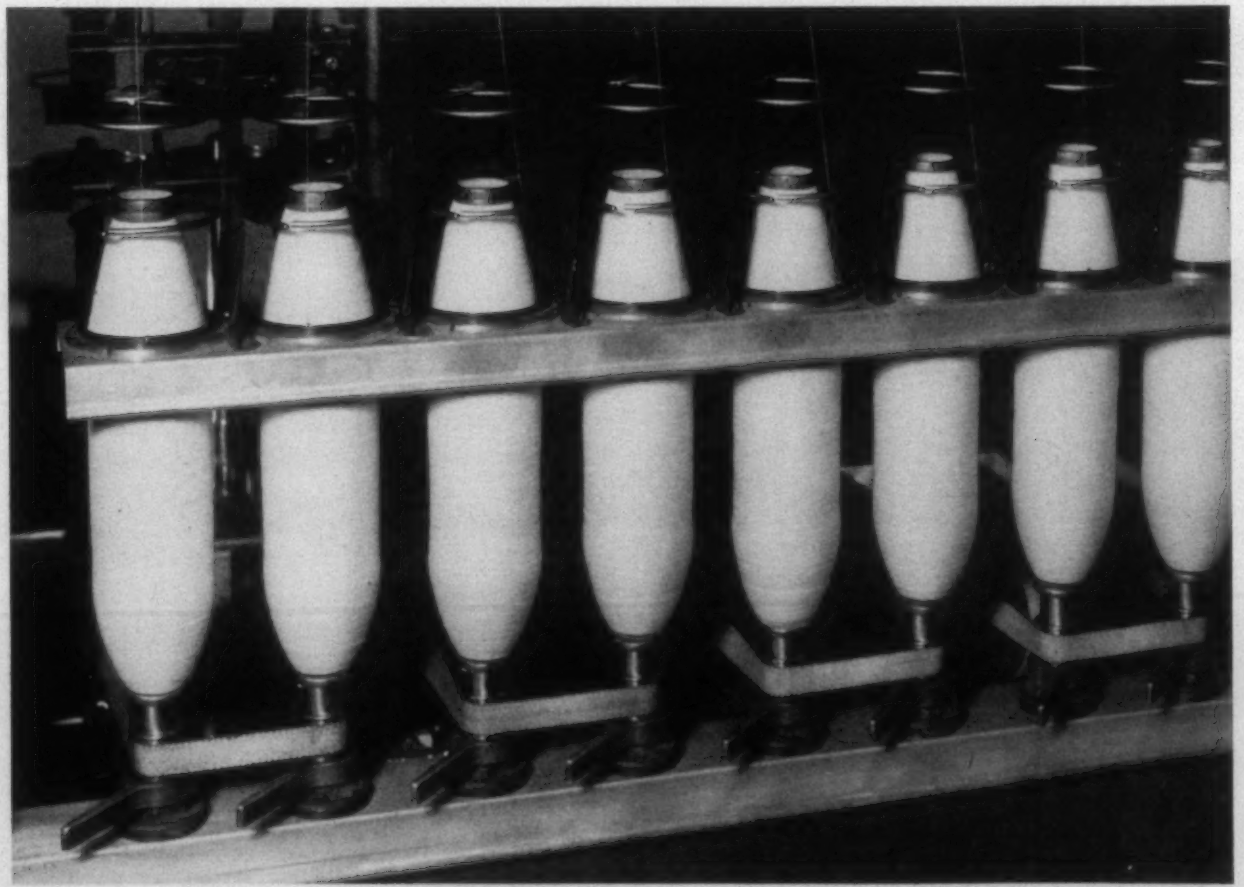
both in spinning and in weaving. Also, a higher spinning production is possible as stronger yarns may be spun with less twist. Finally, the larger package makes rewound filling economically practical. In the spinning room the large package naturally greatly lengthens the normal doffing cycle with a resultant increase in machine efficiency to give a greater over-all production per spindle per hour. This large package will also reduce winding costs as there will be less knots and less waste from tailings and other spooler or winding waste.

Improved Mechanical Construction

Saco-Lowell engineers have, in fact, designed an entirely new spinning frame involving the Gwaltney principles. Since large rings were to be used, it was necessary to build a frame of wider gauges. To compensate for the extra floor space inherent in the wide gauge, the frame was made narrower. While designing the new frame, it was deemed advisable to adapt it to air cleaning, self-lubrication, and other labor-saving devices. These objectives have been completely realized so that when first seen, the Gwaltney spinning frame, with its narrow width and smoothly finished surfaces, is of startling appearance. A close examination will show the numerous improvements which have been made in all parts of the frame and which mark it as being of new design. The chassis itself is manufactured to eliminate cumbersome obstructing parts under the chassis. The greatest possible advantage has been taken of all the new methods of metal working and of the new metal alloys now available to obtain a maximum amount of rigidity and strength with a minimum amount of weight. The frame is strong without being massive.

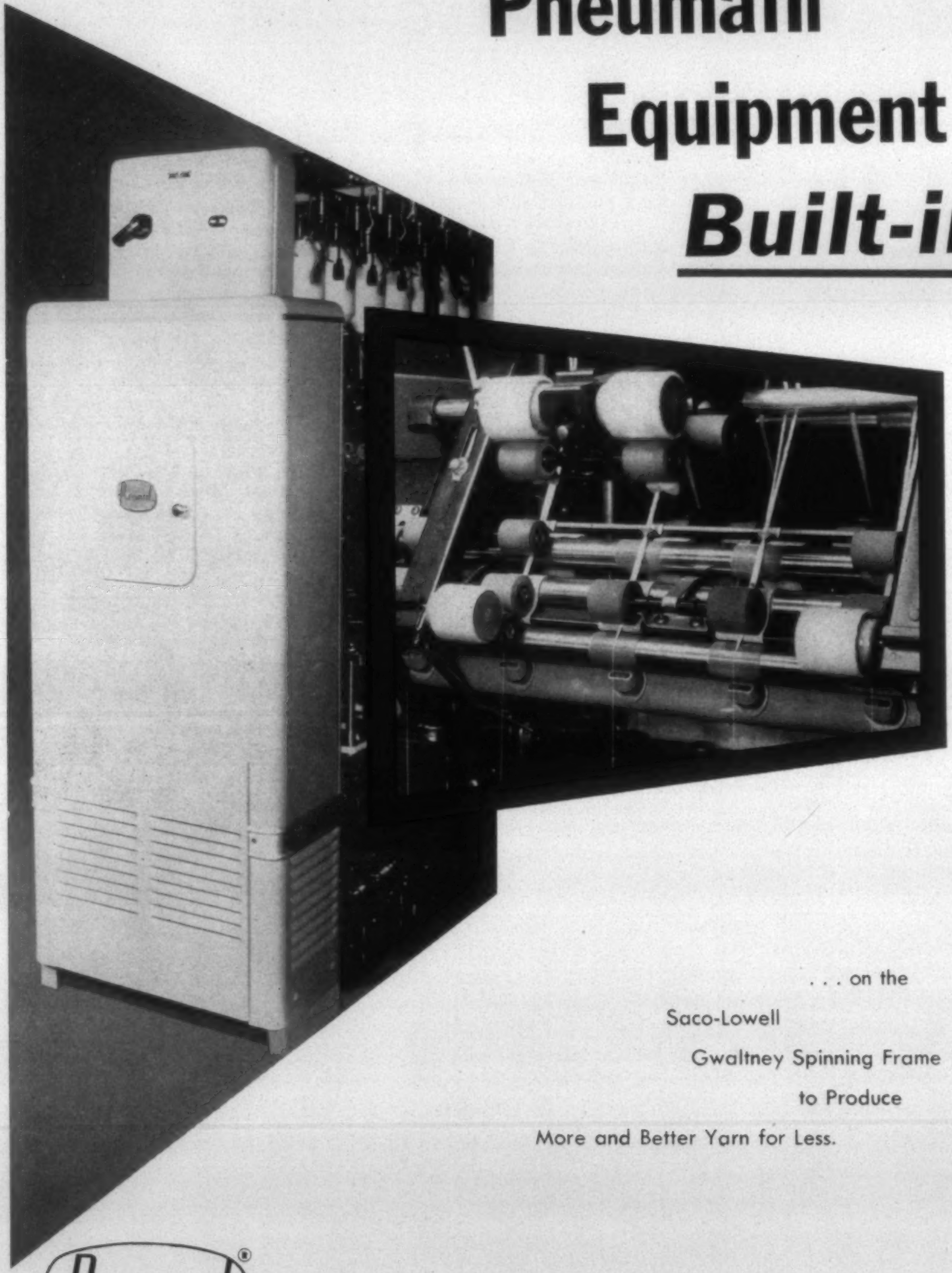
Interchangeable Gears

The head end and head end gearing are entirely different from that of any conventional frame. Although the frame is narrow, the gearing has been compactly placed so that there is adequate space for adjustments. There have been several very practical innovations in making up this head end. As an instance of this, all of the change and constant gears in the head end in the draft gearing are of the same bore and have teeth of the same pitch and width. Any mill man will appreciate this feature as it means that one set of gears can be used as change gears for draft, twist, and lay, with the only difference in any gear being the number of teeth. The interchangeability eliminates the necessity of carrying a large stock of gears and further eliminates the confusion and time lost where gear dimensions vary. As a



The lower two control rings are shown in operating position at the top of the partially filled bobbins. The bobbins are made with an 11¼-inch traverse, three-inch ring, and contain nearly one pound of yarn.

Pneumafil Equipment *Built-in*



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THE GWALTNEY SPINNING FRAME

further refinement, the gearing is designed so that quick changes in draft gear constants may be made.

The draft gearing for both sides of the frame is enclosed in the upper part of the head end, driven by quiet chain drives. The upper portion of the head end which houses this gearing may be lifted up at either side of the frame for quick changes or may be removed entirely from the frame to expose all of the draft gearing if desired. As a further example of the care and thoughtfulness with which this entire frame has been modernized and refined, the doors of the frame are held shut by a magnetic lock which cannot get out of order, does not require maintenance, and which holds the doors tightly shut.

The Drafting Element

In order to make full use of the new principles, the frame has been equipped with a completely new drafting element. The steel rolls mounted in anti-friction bearings are carried on a die-cast roll stand pitched 60° and positioned to deliver the yarn directly over the center of the spindle. The weighted Saco-Lowell-Torrington top rolls are permanently fastened to an arm in order to eliminate the conventional cap bars. Since all of the bearings contained within the drafting element are self-lubricated, the entire assembly will not only require much less cleaning but will be easier to clean since there is an entire absence of oil to catch and hold lint and dust. Lubrication will be required at intervals of six months or longer.

Spindle Drive

The Saco-Lowell New Era spindle has been made standard equipment on this frame, as its excellent performance over the past years has proven its capabilities. The New Era spindle will definitely carry the heavier packages and long traverses of the Gwaltney frame without difficulty. Because the heavier package cannot be stopped easily by hand for piecing up, a standard part of the New Era spindle on this frame is an internal cam-type brake. This brake also has been in successful use for a number of years on New Era spindle twister installations and has proxen to be completely satisfactory in design and construction, requiring little or no maintenance.

A new tape tension pulley and bracket have been developed as a feature of this frame. The pulley itself is mounted on anti-friction bearings, while the bracket is constructed in such a manner that the tension on the tape is maintained by a pre-adjusted internal spring and plunger. One advantage of this new tape tension pulley assembly lies in the ease in which the direction of the twist may be reversed.

The frame is driven by a motor located under the frame near the front end. The motor has been specially designed for this frame and is unique in being water cooled. Today many modernization programs involve complete air conditioning. For this reason, a water cooled motor of special design has been adopted for the Gwaltney frame. The heat generated by the motor is carried off by the coolant, thus reducing to a worthwhile degree the load on the air conditioning unit. Further, the motor has a type of winding which assures a satisfactory uniform efficiency during the entire cycle of the doff. The drive from the motor to the cylinder is through a very efficient type of V-belt to assure a wide range of speeds.

Builder Motion

A completely new builder motion adaptable to either warp filling or combination wind has been designed for the Saco-Lowell Gwaltney spinning frame. The new builder develops an accurate and uniform motion for the ring rail, anti-node rings, and thread guides. A wide range of change gears

REPAIR PARTS FOR SACO-LOWELL MACHINERY are now being carried in this new depot at the Charlotte, N. C., office of Saco-Lowell Shops, making it possible to process 50 per cent of orders the same day they are received. The repair parts system is so organized that when an order is received at Charlotte it is immediately filled if the parts are in stock at that depot. If not, the order is transmitted at once by teletype to Biddeford, Me., for interpretation and is shipped the same day if stocked there. If the parts must be manufactured, the order is placed into production on an urgent basis.

THE GWALTNEY SPINNING FRAME

give complete control over such details as the rate of traverse and the taper at both ends of the bobbin.

Umbrella Creel

Since overhead cleaners have become standard equipment in the modern mill and experience has shown that with the conventional creels the overhead cleaners do not operate at their maximum efficiency, they have eliminated conventional creels and have adopted the umbrella type creel as standard equipment. This creel has several advantages; it will take 12x6 roving bobbins, improves the over-all cleanliness of the frame, and its ball bearing bobbin suspension reduces the danger of stretched roving.

Pneumafil

As there will be a definite reduction in the "ends down per thousand spindle hours" with the Gwaltney spinning frame, the Pneumafil waste collecting system has been adopted and built-in to make the operation of the frame as nearly automatic as possible.

A Step Forward

On the Gwaltney spinning frame, full advantage has been taken of anti-friction bearings with sealed-in lubrication. All of the bottom rolls have anti-friction bearings; the top rolls are all equipped with needle bearings which require lubrication only at very long intervals and practically reduce to a vanishing point the work incidental to cleaning top rolls. The head end and draft gears, cylinders, traverse motion, and builder are also equipped with anti-friction bearings. Nothing on this frame requires lubrication more often than six months. Finally, it has the New Era spindle requiring lubrication at intervals of years instead of weeks.

Since the spinners have thus been relieved of many routine jobs—picking and cleaning top rolls, cleaning scavenger rolls, picking flat clearers, wiping off roller beams and back boards, creeling in and cleaning many small sized roving bobbins—they are able to attend far more spindles than in a conventional spinning room.

The first 30 spinning frames of the new type, named in honor of Mr. Gwaltney's efforts and contributions to the industry, were being successfully completed at the time of his death on Nov. 30, 1951. It is the conviction of the Saco-Lowell Shops that in presenting and offering to the industry the Saco-Lowell Gwaltney spinning frame, they have taken a step along the road of progress which will be as far-reaching in its effect on the textile industry as was in late years the automatic loom and automatic spooler. They believe that the Gwaltney spinning frame introduces a new era in the manufacture of yarns.

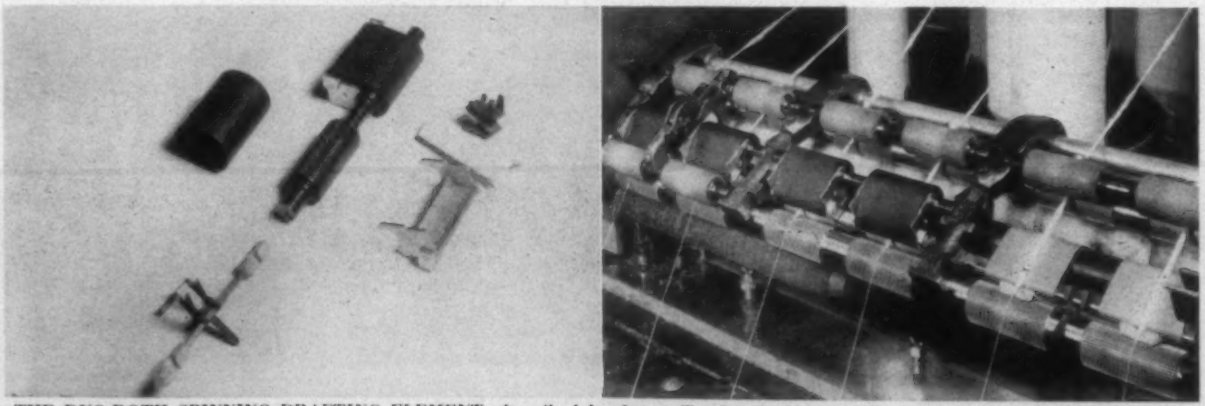
The interest in the Gwaltney spinning frame is evidenced by the fact that many orders have been placed by Southern mills and some are now being erected in the Greenwood Mills at Ninety-Six, S. C.

We do not have a complete list of the orders now held by the Saco-Lowell Shops but the following are some of them. (The figures represent the number of frames. With few exceptions each frame has 240 spindles.)

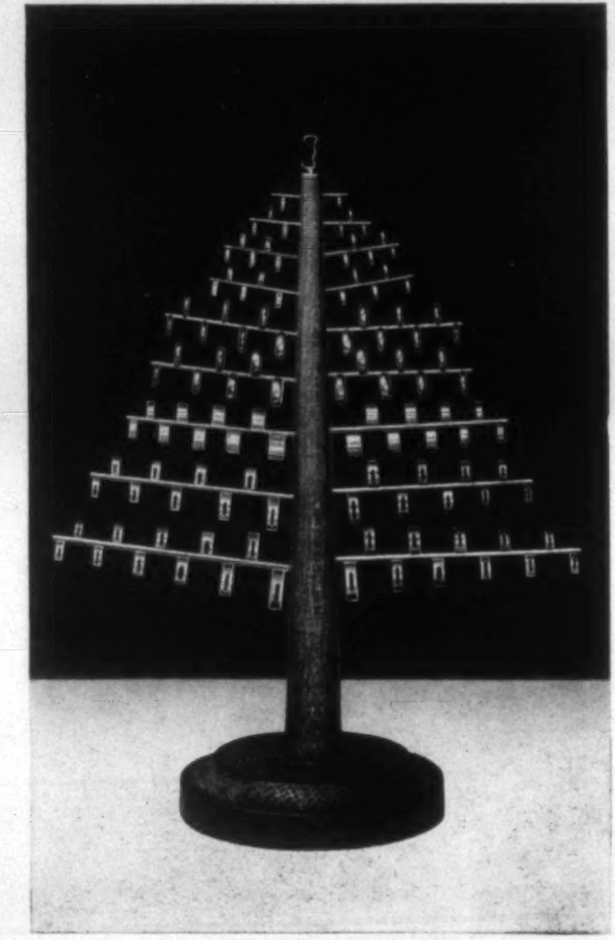
Greenwood Cotton Mills, Ninety-Six, S. C., 45; Alice Mills, Easley, S. C., 45; Riegel Textile Corp., Ware Shoals, S. C., 20; West Point (Ga.) Mfg. Co., 20; Werthan Bag Co., Nashville, Tenn., 184; Russell Mfg. Co., Alexander City, Ala., 25; Swift Spinning Mills, Columbus, Ga., 20; Swift Mfg. Co., Columbus, Ga., 20; Eagle & Phenix Mills, Columbus, Ga., 16; Crown Cotton Mills, 20; Jordan Mills, Columbus, Ga., 20; A. M. Smyre Mfg. Co., Ranlo, N. C., 20; Carolina Mills, Huntersville (N. C.) Plant, 17; Clayton (N. C.) Spinning Co., 20; Textron, Inc., Vass (N. C.) Plant, 20.

About May 1 the Gwaltney spinning frame which I saw at Biddeford, Me., will be shipped to the School of Textiles at N. C. State College, Raleigh, N. C., and mill men who wish to see it in operation will be welcome there.

It will later be exhibited at Clemson College and then at Georgia Tech.



THE DUO-ROTH SPINNING DRAFTING ELEMENT, described by James Truslow in last month's issue of this magazine, is essentially a spinning changeover applicable to current Roth spinning frames or Roth Saco-Lowell frames made since 1929. An operating section of Duo-Roth is pictured *at left.* The changeover (sufficient parts for two spindles pictured *at right)* consists of a Torrington middle top roll, two cages, two top synthetic aprons, two bottom synthetic aprons, one condenser assembly for two spindles, and a hold-down spring.



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DEPENDABLE SOURCE OF SUPPLY

THE MILL OF TODAY

By ROBERT Z. WALKER

Part 31 – Laying Out the Spinning Room

THE general fundamentals involved in organizing a spinning room conforming to the economic requirements of today were discussed in the previous article. At that time the advantages of using long draft and large packages were pointed out, along with other outstanding features which contribute to the operation of an efficient, low-cost spinning room. One important aspect of the spinning room has not yet been mentioned; namely, the proper positioning of the machinery in the room, the planning of the flow of material through the mill, and in the room, and the use of auxiliary equipment which will show a good return upon its investment. The planning of a spinning room may be considered as being divided into three major parts: (1) the efficient use of all labor, both direct and supervisory, (2) the selection of spinning frames most suitable for the particular local mill conditions and type of spinning to be done, and (3) laying out the room and utilizing the accessories and auxiliary equipment which will aid in obtaining the maximum in low-cost production and high quality.

The question of labor was discussed in a broad sense in the last section of this series; however, more detailed aspects of the allocation of work loads will be brought out in discussing the equipment, in an attempt to show that the proper selection of machinery is vital if the maximum benefits are to be realized for each hour of labor involved. The equipment, namely the specification details of the spinning frames, will be covered in later articles. The concern now is the room in which the spinning frames will be installed, and the auxiliary equipment necessary to furnish that room so that the spinning operation will be conducted under the most productive conditions.

The first problem is that of a material flow plan and a floor plan of the frames themselves. Most of the older mills were of multi-story construction and this type of building was built for a long time on a follow-the-leader basis, because the reasons for this type of construction were not adequately understood. However, as soon as the real reasons for using this type of construction were explored, it was apparent that the conditions underlying its use were completely outmoded. Economic, architectural, and textile engineering principals were then considered, and from this grew the modern mill construction which is now being so successfully utilized and so widely followed.

When the multi-story buildings were coming into vogue, the entire economic structure of the country was different than it is today, and this type of building was most suitable to fit into that situation. First of all, individual motor drives, or individual drives, were not yet developed and the mill had to use a single source of power for all operations. At first this source of power was in the form of water, and therefore the mill had to be located on the banks of a swift running stream or river. Furthermore, the machinery had to be grouped so that the drive from this power supply would not be too long or extended. In those days the amount of floor space required per pound of yarn produced per hour was high because of slow speeds, and because of the large number of preparatory processes necessary when using the equipment available at that time. In view of these facts, the mill building was arranged in multi-stories to reduce the length of the drives. At first, the common practice was to have a rope well in which the drive from the main shaft was taken, by rope drive, to the main shafting on each floor. All of the drives on each floor would then be driven, in the usual group drive arrangement, from the main shaft.

There was a second reason for using multi-story buildings. The textile industry was first started in this country in the New England states, where each community was built around the various industries which were located along the stream which furnished all of the power. Suitable sites for generating water power were valuable and therefore the mills were forced to conserve space. It must be remembered that at that time automobiles were unknown and so there was the problem of employees' transportation to and from the mill to their homes. Labor was scarce in some towns, and the mill had to be located close to the homes of the operators. If people could have driven to the mills, as can be done today, this problem would not have been present and no doubt there would have been mills scattered around the outskirts of town, where space would not have been so restricted. If this had happened, no doubt, the change to a single-story building would have started many years before it actually happened.

Today, there has developed a completely new school of engineering devoted to the problems of material handling. At that time lift trucks, conveyor belts, and all of the other mechanical power moving devices were completely unknown. Material was moved by hand trucks. The difference was that in the older mill the cost of hand movement was not too important because the cost of that type of labor was extremely low. Such factors as waiting time, traffic congestion, the labor required, and the inefficient flow of material, which are so carefully studied now, were considered but slightly, if at all. The usual practice was either to have the opening room on the ground floor feeding the stock to the pickers on the top floor, with successive preparatory processes on successive floors below, or else to have the pickers also on the ground floor and then to move the stock up until the spinning room was reached at the top floor. In practically all cases the weave room was on the ground floor in order to reduce the troubles caused by vibration of the looms. It is easy to visualize the confusion and wasted time when stock was moved from floor to floor by hand trucks, down narrow aisles, waiting for clearance to move up or down from one floor to the next, and returning empty trucks.

The modern building, on the contrary, is of the windowless, one-story construction, located at the edge of town. First of all, the building does not have to be built as large to produce the same amount of finished yarn or fabric because higher speeds and reduced preparatory processing have increased the potential production per square foot of total floor space. The increased number of picks per minute of the loom, the larger ring sizes and resultant larger packages of the spinning frame, together with higher spindle speeds, are examples of the increased production per unit; the reduction of drawing processes and roving processes to one process of each is indicative of the drop in required preparatory stages. Both aid in creating a small, efficiently handled, high-production mill.

It is quite true that the spinning room should be planned and laid out so that there will be maximum production per square foot of floor space. However, it does not always follow that the spinning frames should be crowded into the smallest possible space. It is possible to arrange the frames so closely together, making the alleys very narrow between frames and between ends, that both spinners, doffers, and fixers find it difficult to attend the frames properly and efficiently. The room will be more efficiently run if the alleys and distance between the frames are wide enough for doffers' trucks to be moved easily and to allow elbow room for fixing the frames. In addition, the wider alleys allow more light to penetrate down around the frames and therefore the spinner will be able to piece-up and otherwise carry out her duties more quickly.

In the average mill building of today, the bays in the spinning room are 26 feet wide, with most mills built in either three or four-bay widths. In some mills the outer alleys are made wider by leaving one frame from the bay, in other mills the two outer bays are filled, but a wide central alley is obtained by leaving out one frame in the center bay. A full bay will accommodate a maximum of four frames, an alley bay three. As the standard spinning frame is approximately 42 inches wide, and with four frames to the bay, the alleys will be only about 26 inches across from frame to frame. In placing the frames on the floor the frame adjacent to the posts at the side of the bay should be at least nine inches from the post, so that the spinner and doffer will be able to attend the spindles closest to the post. There have been some mills constructed with bays approximately 33 inches wide, so that one frame may be added to the bay while keeping the same alley space between the frames. Alleys over 30 inches wide should be used if possible, as the greater working space will always be beneficial to the general working conditions of the room.

In constructing a new building the one-story design offers very definite advantages as it is possible to space the supporting pillars or posts very widely, or even to eliminate them entirely. If the posts which determine the bays are eliminated, then the frames may be arranged more easily and flexibly. It is then possible to place the frames in batteries, according to work assignments or to groups of frames segregated into the specific lots of yarn being spun, which will help in improving production, eliminating errors in stock handling, and very definitely expediting the smooth flow of material.

The reduction of posts, or the entire elimination of them in a single-story building, is due to the fact that the load of a single-story building is so much less than that of a multiple-story mill. Other favorable features of single-story constructions are the lessened vibration and the possibility of softening noise by acoustical dampening materials that are made a part of the building itself.

In the ultra-modern mill the window is considered a sign of antiquity. Mill management and architects are just beginning to realize just how much effect the window had upon the performance of the spinning frames and upon the cost of plant maintenance. In the first place, windows require cleaning, particularly where high humidities causes a collection of moisture which attracts and holds lint, and necessitate frequent replacement of broken window panes. Secondly, and more important, windows raise havoc with attempts to maintain a controlled atmosphere. Sunlight beating through windows or cold air in Winter cause the temperature of the outer sections of the room to fluctuate either up or down. In either case the all-important degree of humidity will change accordingly. It is all too well known to most mill men that a change in the amount of relative humidity in the air of the spinning room will cause a reaction in the behavior of the fibers and in the operation of the spinning frame. Mills which do have windows in the spinning room often paint them, or use curtains to minimize the effect which they produce, or preferably brick them up.

Windows are no longer needed because of the improved lighting which is now considered essential in the spinning room. In the old days, windows were relied upon to furnish most of the light. However, when three shifts were used instead of one, then artificial lighting was necessary. This initial lighting was usually obtained by using incandescent bulbs, shaded by metal reflectors, and supported from drop wires hung from the ceiling. Lighting was bad when taken from this source as the illumination was not even but was concentrated beneath each bulb, leaving dark areas in the outer ranges.

Up-to-date lighting is much preferable to daylight, and has progressed a long way ahead of the first types of artificial lighting. The application of high level lighting marks very tangible advances in mill construction and mill equipment. It has made windowless buildings practical and possible. Whereas at first mill management hesitated to attempt to use this type of construction because of possible protest by operators, they have now been relieved to find that actually the complete use of artificial lighting is preferred by the people who must work in the room. The high level lighting system, using banks of fixtures at ceiling level, provides uniform brilliance at all sections so the room is neither glaring nor dim. In addition, the lighting is identical at all times, never changing regardless of the time of day or weather conditions. Whether direct or indirect, incandescent or fluorescent, a range of 35 to 40 footcandles is recommended as necessary for maximum employee comfort and efficiency.

It might be well to point out here that the use of individual motor drives plays an important part in permitting this type of lighting, and in obtaining the full benefit from windowless construction. Individual motor drives do not

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require overhead shafting and belting and therefore the lights may be arranged in accordance with the best engineering principles without thought of interference with frame driving obstructions. A big item in favor of windowless construction is that there are not any windows to allow dust and dirt to enter the room. Overhead belting and shafting tend to stir up dirt, carrying it into the air and letting it fall into the roving in the creels and onto the yarn as it is drafted and spun. Where individual motor drives are used there is not any air disturbance in the room to carry any foreign matter up to the air. Also, total cleanliness is better as there is not any belt dressing or shafting lubrication present up near the ceiling, where it could easily fall into the work and completely undo all the benefits obtained when outside dust has been excluded.

The new windowless spinning room construction has also brought about complete control of the atmospheric conditions in the room. With this type of mill building, atmospheric control can be developed past the stage of merely maintaining a certain degree of humidity and can become complete air conditioning, without representing an investment too large to be considered practical. As the walls are thick and insulated, and as there are not any windows which transmit heat or cold from the outside, there will be considerable savings in heat consumption. Also, the capacity of the air conditioning unit need not be as large nor will its cost of operation be so expensive. A smaller conditioning unit will serve for the same floor space where windows have been eliminated, for the building will be engineered to reflect heat in the Summer and to conserve it in the Winter.

The consensus of opinion, backed by many tests, and the result of extended experience in many mills, is that the spinning room should be maintained at a temperature of 70 to 80° F., with a relative humidity ranging from a low of 60 to a high of 65 per cent. While these figures are particularly specified for the spinning of cotton, the change is generally not too great for processing either wool or most synthetic staple fibers. When the relative humidity becomes too low the fibers tend to dry out, causing the generation of static electricity as fibers are drawn past each other in drafting, or past other materials. When static electricity is present the erratic movement of the fibers causes the spinning of weak, uneven yarn and an increase in the number of ends down. On the other hand, when humidities are too high, there will be trouble as the fibers tend to stick to the drafting rolls, breaking the ends down and making lap-ups which are difficult to remove.

Humidity and air temperature are closely related, but the relation is not always understood. The relative humidity is the per cent of total humidity, or water content, that air will hold at a given temperature. If this temperature is changed then the relative humidity will also change, although the same amount of water may be in the air. It is relative humidity, not water content, that is important. For instance, the moisture content capacity of the air may be doubled if the air temperature is raised 20° F. If the temperature is raised this amount, and if there is not any more water added, the relative humidity will be reduced to one-half.

Therefore, the modern mill must be equipped with some system which will control the relative humidity by injecting water into the atmosphere in accordance with temperature changes. All fibers are more or less hygroscopic, that is, they take moisture from the air, or release it, in accordance with the room temperature and relative humidity. Wool is classed as being most highly hygroscopic, cotton and viscose quite sensitive to atmospheric conditions, while acetate and most other synthetics are not.

At the present time, there are several major systems of maintaining the correct humidity in the spinning room. The first group is built around the use of heads of water under pressure, with fans to aid in distributing the spray into the room. Atomizers, which inject a fine spray into the air, are also widely used. Another major method is the use of ducts which carry properly conditioned air into the room, distributing it at intervals throughout the entire area. Regardless of the type of system used, the control of humidity or water content must be maintained by instrumentation. The modern mill, with unobstructed overhead, and without windows, is ideally suited to maintain atmospheric conditions that never vary. This, coupled with even lighting at all times, should insure obtaining maximum production at all times. Quality should remain high, for the variables of temperature and humidity have been eliminated so that spinning conditions will become more stabilized.

Whitin Expands Operations At Charlotte

Operations at the Charlotte, N. C., branch of Whitin Machine Works are being expanded to include two new manufacturing departments. Departments manufacturing oiler bolsters and Whitin-Schweiter winders are being moved to Charlotte from the company's headquarters in Whitinsville, Mass.

The two departments will be housed in the main part of Whitin's Charlotte plant in space formerly used for storage. This space was made available by the construction of an all-concrete warehouse addition providing 15,000 square feet of floor space.

Machinery for the oiler bolster department is already installed and that for the Whitin-Schweiter winder operation is expected to be installed and ready for manufacture to begin in the early part of the Summer.

Whitin Machine Works announced last month that it has acquired from George D. Flynn, Jr., and the Hazard Brownell Industries, both of Providence, R. I., that portion of the Howard & Bullough American Machine Co., Pawtucket, R. I., relating to their manufacture of textile machinery and repair parts.

It is the intention of the Whitin Machine Works to make available to the textile industry repair parts and supplies necessary to enable mills now having H & B equipment to properly maintain it and keep it in running order. The unfilled orders for repair parts now on H & B books will be taken over and completed by the Whitin Machine Works.

Among recent patents issued to textile men, according to Paul B. Eaton, is the following: Patent No. 2,555,563 issued to Gilbert Benton of Concord, N. C., for a triple spout oil can which is particularly adapted to be used in the textile industry for lubricating spinning frames and the like. The spouts of the oil can are spaced to correspond with the bearing portions of the rolls of a spinning frame.

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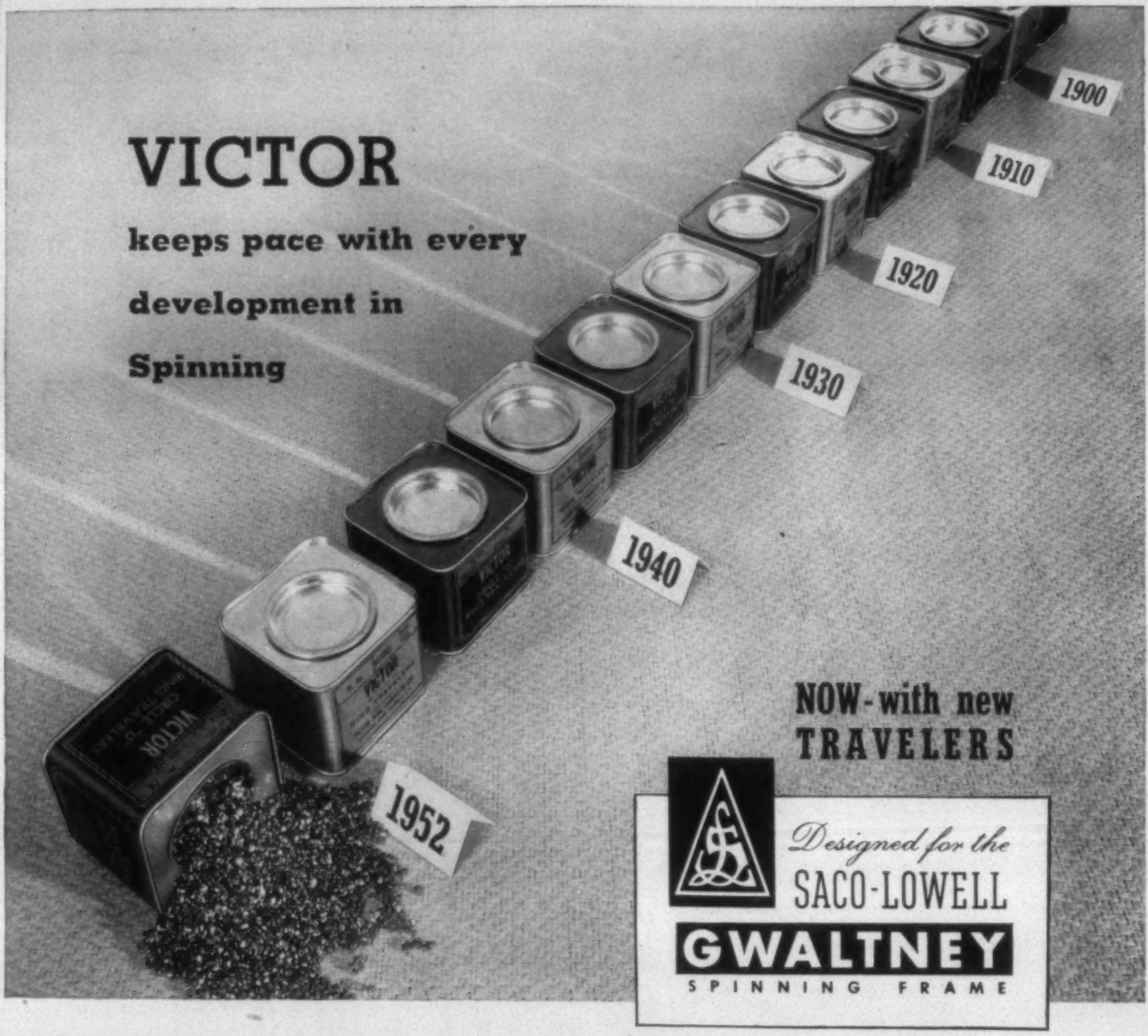

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By FRANK D. HERRING

Part 35 — Selecting and Training Loom Fixers

IN PREVIOUS articles we have covered the building of the loom, assembling, applying and adjusting all the parts and motions, and also the reasons why the various parts should be applied and adjusted thus and so. We have also covered most of the woven fabric imperfections caused by loom parts adjustments and ways and means to correct these faults. After the loom has been assembled and put into operation in good condition, good loom fixing consists of working out a plan of procedure for the loom fixer which will maintain and keep the loom running in good condition. The loom fixer cannot do this alone; he must have the benefit of the full co-operation and help from many others involved in the maintenance and operation of the loom. The overseer is the key man in this set-up. In fact, he is the key man in any departmental set-up, because he is the one who must accept full responsibility for the final results from his department.

I have been working with loom fixers for more than 40 years. Many years ago I arrived at the conclusion, by observation and practical experiences, that loom fixing is the weakest link in the manufacturing chain of the weaving mills. I have never as yet had reason to change my conclusions on this subject. The loom fixers are not to blame for this deficiency, because they have no say on how the beginners are selected and trained. In my opinion, three things are responsible for the weakness of the maintenance personnel in the weaving departments. (This maintenance personnel consists of the supervisory, oiling, and loom fixers).

First, the present-day automatic looms are much more complicated than the older looms were, because they are required to do more things, and do them better. They are operated at a higher rate of speed which creates additional strain and vibration on most parts of the loom. All of this puts greater demands on the loom fixer, because he has more parts to adjust, and these parts require more accurate adjustments and split-second timings. It all boils down to this—the loom builders have built a much better, more substantial machine, but they have been compelled to put on additional parts, and more complicated apparatus in order to meet the present-day demands and requirements. These looms will do the job satisfactorily, provided they get the proper maintenance after they are installed and put into operation, but if they do not get the proper maintenance they will go down quicker because there are more things on them to get out of adjustment, and in this event the mill officials will soon awaken to the fact that they have a very expensive nightmare on their hands. This is certainly not intended as an indictment against progress, the modern automatic loom of today, but an indictment against the supervisory personnel at the mills for failing to properly select and train the maintenance personnel to meet and properly cope with the present-day loom requirements. It's true that many mills have accepted the above mentioned facts and are doing something about it, instituting selection and training programs to bring their maintenance personnel up to date, but too many mills have done nothing to supplement for this very costly deficiency.

Second: Selecting the proper personnel for loom fixer training. A good loom fixer is a highly-skilled mechanic. To be a highly-skilled mechanic one must possess certain qualifications which all men do not have. Of course they must be physically able to do the work, and they must be mechanically inclined, have mechanical minds, like mechanical work, and should have ambitions to try and work themselves up to better jobs than fixing looms. Any man who is capable of training loom fixers properly should be able to devise certain simple aptitude tests for the trainee which will reveal to him, very readily, if the trainee possesses the above mentioned qualifications. Of course the trainee must want to learn to fix looms, but this alone should certainly not be the primary reason for selection, because wanting to do is only a commendable desire, and desiring to do a thing does not always mean that one has the abilities to do it. Most any man with average intelligence can be taught to build a loom, learn to apply and correctly adjust every part on the loom, but this does not prove that he can learn to fix looms and keep them in running condition after the warp has been put on them, because certain skills and traits of ingenuity are required to fix and operate the loom that are not needed when building the loom. (I learned this fact the hard way, because I learned to build looms several years before I tried to fix looms). One can build a loom and set most all the parts on the complete assembly with the use of gauges, and of course this does not require a great amount of skill and mechanical know-how, but one positively cannot fix and operate a section of looms with gauges alone. To some readers I know that the above statements will not seem to make sense, but I will stand four square on them. Anyone who wishes to disprove them can become convinced by having a dozen looms set up with gauges, then put the warps on them and try to put them in operation weaving cloth. It will be learned that many adjustments on many of the parts on most all the looms will have to be made before the 12 looms operate successfully. Many reasons could be given for this, but the primary reason is that a loom is not a precision-built machine, and there are many contacts and connections of the moving parts, and these contacts and connections will vary; some will have more lost motion than others, and some will have excessive friction, and the setting and timing of most all the moving parts will affect many other parts when the loom is in operation.

Third: Training the fixer. I think it is wise policy to teach a trainee to build a loom before starting his loom fixing training, because he will learn many fundamentals which will stand him in good stead when he begins to learn to fix and operate the loom. When teaching a class of trainees it is best to have two looms in the classroom to work with. One can be dismantled completely and reassembled, and the trainee should be allowed to do this work under the guidance of the teacher, or instructor. They should be allowed to build the loom and put the shuttle in it and put it in operation without the warp on it. The other loom should always be ready to operate with a warp on it. With this set up the trainees can be given all the basic fundamentals in building and fixing looms. During this period of training the trainee has been listening, studying, and learning, and now should be ready to get out on the job and begin to use his own ingenuity and skill and finish his course of training largely on his own. But for a while after he is put on a section he should have someone to call on to help him over some of the bumps and hard places.

By having two looms at his disposal the instructor can teach the trainees the hows and the whys of loom fixing. When building the loom they will learn how to apply and how to adjust the various parts. Then he can move over to the loom with the warp on it and teach them why the parts should be applied and adjusted thus and so. The instructor should be a man who is capable of teaching the trainees other things besides loom fixing. He must first sell himself to them, and a good way to start on that is to get the fact over to them that he is still learning and never expects to reach perfection and know all there is to learn about weaving and loom fixing, and that he expects them to take up where he leaves off and go on from there, learning new and better ways to do the job. He should lecture them often on the importance of co-operation. Learning to work with other people, and be willing at all times to learn from others. He should be able to prepare the trainee for the opposition he is sure to meet from most of the loom fixers on the job. This opposition will come largely from the older fixers; they will have a natural resentment towards the beginner, because deep down they are conscious of the fact that the trainee might get their jobs some day. This is where the instructor and the trainee must have the full support and co-operation from the supervisory personnel if satisfactory results are to be attained. Just one disgruntled, determined, loud talking, meddlesome loom fixer can disrupt and completely nullify a loom fixing training program, provided he is allowed to run rampant and do as he pleases on the job.

To further clarify the above statements, I would like to relate a conversation I had with an old loom fixer recently. This man has been fixing looms, or rather he has been on a section, for a sizable number of years. We were discussing loom fixing in general, and he stated that there were not many good loom fixers these days, compared with the fixers of the old days, and he further stated that the younger fixers of today were the most inefficient of the lot. I did not agree with him, so, I asked him just what was wrong with the younger fixers and his answer was that just as soon as they learned how to put on a picker they were ready to start telling us old fixers what to do and how to do it. I replied that if they had been properly trained they might be able to teach us something, and that I felt like we at least should be willing to listen, with patience, to what they had to say, and if we thought they were wrong we should try and straighten them out. I asked him if he would show me just how he put on a picker, and he stated that there was only one way to put one on and that was to drive it on the stick and parallel it with the shuttle point, or knurl, then secure it to the stick with a wood screw and start the loom. I asked him what he did in case the hole in the picker did not line with the shuttle knurl at the point where the shuttle lost contact with the picker on the forward stroke of the picker stick, and he said that he just let it go as the shuttle knurl would seat itself in the picker after the loom ran a day or two. Of course this man is not, never has been, and will never be a loom fixer, and will continue to be just what he has been for many years—a very expensive man on the job.

The above incident is not an uncommon one, but is very prevalent throughout the textile industry, and the answer to this condition is that these men were never given the necessary training in the fundamentals of loom fixing before they were put on sections of looms and allowed to go their ways on their own. Most of the old timers (I consider myself one of the group of old timers) take much pride in the fact that they went right on to a section of looms without any preparatory training whatsoever. I don't think this was good business at any time, but there was a day in my memory when this could be done without too much damage to the efficient operation of the loom, because about all the loom fixer had to do was to box the shuttle and set the harness, and too, the looms operated at a much lower speed than the present-day looms.

As stated before the trainee should get the basic fundamentals in building and applying and setting up the various parts of the loom assembly during his class room training period. This is vitally important, and necessary, in order for him to be able to meet the requirements when he goes into the weave room for his final training in fixing looms. This is a very important part of the trainee's training, because success or failure largely depends on the way he gets started off on his on-the-job training. He should be convinced that he cannot become an efficient loom fixer by checking and working on looms alone which are flagged by the weaver, but must learn how to check over the loom on his section while they are running, and do a lot of preventive loom fixing. He should be taught what to check on his daily rounds over his section. When he goes to a loom which has been flagged for him, and he is not certain just what is wrong with the loom, he should ask the weaver what the loom is doing, or failing to do. He should also be taught not to start working on the loom until he has reason to believe that he knows what is wrong. He should be made to realize that finding out what is wrong with a loom is the most difficult part of fixing looms, because after the trouble has been found the remedy is usually easy.

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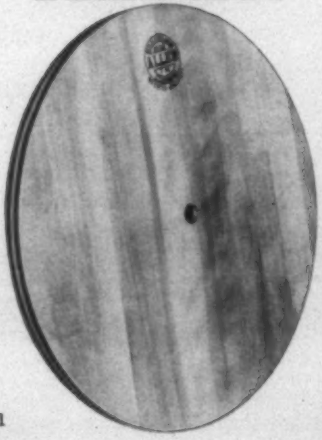

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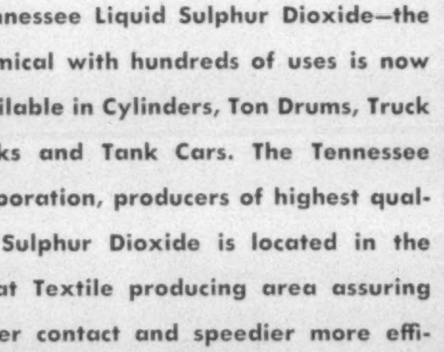

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Bleaching, Dyeing & Finishing

The Dyeing Of Nylon, Orlon & Dacron

By S. G. TURNBULL, JR., E. I. du Pont de Nemours & Co., Inc.

NYLON is now in its 13th year on the American market. During this time we have learned that nylon can be dyed readily with more dye classes than are applicable to any other commercial fiber. While the outstanding fastness properties of vat colors on cotton and on wool have not yet been obtained on nylon, we have learned to apply them more readily. There is some possibility that in the next decade we will learn how to obtain the excellent light fastness of the vat colors on nylon in commercial dyeing. It is known now that light fastness equal to that on cotton can be obtained by growing the vat pigment particles within the fiber to optimum size. We do lack a commercial method for this at the moment.

Nylon is readily dyed with acetate, acid, chrome, Chromacyl, basic and some direct colors. Naphthanil dyes can be applied, but lack the brilliance and light fastness possible on cotton, viscose and acetate. Over the years, selected old or established colors from the acetate and acid classes have been designated by their manufacturers as particularly suited for nylon. However, within the past two years, a new class of dyes designed particularly for nylon has been introduced. This new class of dyes, identified as "Capracyl" dyes by the manufacturer, has outstanding light fastness on nylon and is particularly suited for the dyeing of staple, top and tow going into upholstery, drapes and similar end-uses. The good wash fastness and neutral-dyeing properties of this class of dyes recommends its use in men's hose, and in blends with cotton and other cellulosics.

The use of the Capracyl line is continuously increasing for nylon and for wool dyeing. In general, we can say that at the present time most of the lightweight nylon filament fabrics are dyed with acetate colors. Heavyweight filament fabrics, staple and fabrics of spun nylon, and nylon blends with cotton and wool are usually dyed with the Capracyl dyes or with selected acid dyes. Because of the durability of nylon in prolonged use, the trend is continually towards faster colors.

Acetate dyes are used widely where good levelness accompanied by moderately good wash fastness is desired. This color type shows excellent transfer properties on nylon, and consequently is widely used to obtain optimum fabric appearance in piece dyeing. As examples, we cite the use of acetate dyes for women's full-fashioned hosiery, lingerie, blouses, and similar gossamer garments. In addition, they are used for the dyeing of staple yarns for rugs and of knitting yarns in pastel shades, etc.

Acid, direct and Chromacyl dyes are used for heavierweight nylon filament fabrics, and for the dyeing of nylon staple in stock, top, fabric or garment form. While these classes are more difficult to apply levelly than the acetate dyes, and also in some combinations are accompanied by "blocking" in heavy shades, selected dyes do possess better light and wash fastness. Examples for the use of these types include filament auto seat covers, household upholstery and fish nets. Nylon staple articles dyed with these dye classes include men's and children's socks and sweaters. In general, we can say that on nylon, these classes are equal or superior in light and wash fastness, particularly the latter, in comparison with dyeings on wool.

Where excellent light fastness and wash fastness are required, the Capracyl dyes come into consideration. For example, medium to heavyweight staple and filament fabrics dyed with this class include auto tops, work clothing, military fabrics, outdoor furniture, sports fabrics, etc. In addition, nylon staple for transportation upholstery, suiting blends, and military fabrics is dyed with Capracyl colors. This class is also used for nylon staple in socks, men's shirtings, and drapes.

The light fastness of the Capracyl dyes on nylon is equivalent to that of selected vat colors on cotton. Wet fastness on filament fabrics is excellent. On staple fabrics the wet fastness is not quite so good as on the filament form. However, the wet fastness is improved to that of chrome colors by aftertreatment with tannic acid and tartar emetic.

Chrome colors are used in certain specific fields where excellent wet fastness is required, accompanied by moderate to good light fastness. Examples for nylon filament yarns include sewing yarns and effect yarns for use in full-fashioned hosiery and suitings. Staple yarns for men's argyles are dyed with chrome colors, but selected acid, Capracyl and Naphthanil dyes are also used for this purpose.

While vat colors find most use for nylon-cellulosic fiber blends, being used to dye both components of the blend, they are also used for certain specific end-uses on all-nylon fabrics. For example, Hoffman press covers, exposed to continued high heat in use, are dyed in tan, gray and brown shades with vat colors.

Basic colors find some use on nylon for fluorescent effects. A few shades with fairly good light fastness can be obtained, but in general the light fastness is about comparable to that on other fibers. The wet fastness is superior to that on most other fibers but inferior to that on pressure-dyed Orlon acrylic fiber.

Optical whites applicable to wool or cotton can also be applied to nylon. Certain types having good wet fastness are available. The light fastness is equal to that on cotton or wool.

A few generalizations can be given concerning fastness properties. The wet fastness of dyes on filament nylon is usually noticeably superior to that on spun nylon. However, to compensate, spun nylon is more readily dyeable. The light fastness of all color types, with the exception of vat colors, is noticeably better on bright nylon (no delusterant) than on semi-dull nylon, and appreciably better when compared with that on fully delustered nylon. Vat colors appear to improve in light fastness as the quantity of delustering component is increased, up to a certain concentration. It is believed that this is caused by increased crystal growth of the vat pigment in the "holes" left by the delusterant in manufacture.

Nylon Blends

For making nylon-wool blends, nylon staple can be stock-dyed, blended with stock-dyed wool, spun into yarn, converted into woven or knit piece goods and fabrics, which can then be finished by methods ordinarily used for woolen fabrics. Dye types ordinarily used for stock-dyeing the nylon component are Capracyl, Chromacyl, chrome, and selected neutral-dyeing acid dyes. The wool will usually be dyed with chrome colors.

Nylon-wool blends can also be piece-dyed satisfactorily. Milling types are most generally useful. In pale shades, the use of long-chain alkyl sulfates prevents color from transferring from the wool to the nylon, so that the latter does not become more heavily dyed. Success will depend upon the shade, the fabric blend and the construction. Chromacyl colors are particularly useful for dyeing nylon-wool blends that have been carbonized.

Several methods are available for dyeing unions of nylon with cellulosic fibers. The neutral-dyeing Capracyl dyes, as they show little stain on cellulose, can be used in conjunction with fast-to-light direct dyes for the cellulosic fiber. Other methods used in the trade include the following: (1) Nylon, acetate dyes; cotton, direct dyes. (2) Nylon, neutral-dyeing acid dyes; cotton, direct dyes. (3) Nylon, Capracyl dyes; cotton, vat dyes (two-bath). (4) Union-dyeing vat colors for covering both the nylon and cellulosic fiber.

Dyeing Orlon

This young debutante of the textile world is currently commercially available as filament and fiberstock. The latter term designates a form of staple made by cutting up by-product filament production. Regular staple production will have a higher dye affinity than either filament or fiberstock.

Color classes having affinity for Orlon are acid, acetate, basic, vat and some azoic types (3). Acid colors have good to excellent affinity *for staple* when applied at or near a full boil by the copper salt-hydroxylamine technique. At elevated temperatures they can be applied with copper salts and certain reducing agents, such as glyoxal. Filament yarn (type 81) and fiberstock have less affinity for acid dyes applied by the cuprous-ion technique. Consequently, it is necessary to use assistants, such as substituted or unsubstituted phenols, aromatic carboxylic acids, etc. Even with the use of these agents, however, it is necessary that the dyebath boil actively to get good color exhaustion and fixation. Better fixation can be accomplished without these carriers at elevated temperatures near 250° F. Many mills are now equipped for experimental pressure dyeing of rawstock and yarns, and some have progressed to commercial dyeing at elevated temperatures.

When properly applied, acid dyes on filament, fiberstock or staple show good wet fastness, and good fastness to sunlight is possible by proper color selection. Fastness indicated by Fade-Ometer may be misleading, so determination of light fastness by actual sunlight exposure is recommended.

Control of drying time and temperature is important in the dyeing and finishing of Orlon acrylic fiber. In the cuprous-ion process, drying time and temperature are determined by the copper concentration in the dye bath. For example, fiber dyed in the laboratory in a bath containing four per cent cuprous ion can be dried at 250° F. for a maximum of three minutes. Since it has been determined that the presence of copper accelerates browning, which results from excessive drying time or temperature, it is important that the minimum quantity of copper be used to obtain the desired shade and that time and temperature control compatible with the copper concentration be established in drying. Wool that is to be blended with cuprous-ion-dyed Orlon fiber should be either dyed or acid-treated to prevent color destruction on the Orlon fiber when subjected to dry or moist heat.

Acetate dyes applied to Orlon at 212° F. generally produce light shades. At 250° F., however, eight to ten times as much color will be absorbed, so that medium shades are possible. Pressure-dyed acetate colors have a wet fastness about equal to that of vat colors on cotton, and selected dyes show fairly good sunlight fastness.

Selected indigoid and thioindigoid vat colors have affinity for Orlon acrylic fiber at 212° F., but at this temperature are "ring-dyers." By increasing the temperature to 250° F., however, excellent yarn penetration and full shades can be obtained. Better color absorption and protection of the fiber against alkaline degradation is obtained by using approximately three parts of sodium bicarbonate per part of caustic soda employed for color reduction. Indigoid and thioindigoid vat dyes on Orlon are outstanding in wet fastness and have light fastness of the order of that on cotton, in the range of 15-30 hours for some shades, while 80-160 hours can be obtained in black shades.

Soluble vat colors can be applied to Orlon by a simple modification of the technique used for cotton, and vat pigments can be applied by a modification of the Thermosol process. The light and wet fastness of the light shades so produced are considered by the trade to be adequate for some uses, as for curtains. Basic dyes have fair affinity for Orlon at 212° F., and excellent affinity and wash fastness at 250° F. However, the light fastness is only fair.

Blends With Orlon Acrylic Staple

Good unions in solid shades have been impossible to obtain on blends of Orlon staple and wool. However fairly good tone-in-tone effects can be obtained in some cases. Success depends largely upon the blend and the fabric. However, the Orlon component can be dyed with acid colors or acetate dyes, and the wool can then be cross-dyed after the fabric is knit or woven. It is preferable to pressure-dye the Orlon stock, so that the dyes thereon will have sufficient fastness for mill-processing and the cross-dyeing operation.

Cellulosic blends can be dyed by two-bath methods as follows: (1) After dyeing the Orlon to shade by the cuprous-ion technique, apply direct colors to the cellulosic fiber in a fresh bath at 160-180° F. (2) After vat-dyeing the cellulosic fiber at 160° F. or below, apply acid dyes to the Orlon in a fresh bath by the cuprous-ion technique. Reversal of this order of application also appears possible.

Dyeing Dacron Polyester Fiber

Dacron, the subdebutante Du Pont fiber, which will not reach its commercial "coming-out" stage until 1953, is noted particularly for its bounce and resiliency, and its ability to shed wrinkles. It looks particularly attractive for tropical suitings.

This fiber, which will be commercially available in filament, fiberstock and staple forms, has affinity for fewer color classes than nylon or Orlon acrylic fiber. For practical purposes, only acetate, developed-acetate and certain azoic dyes can be applied. In spite of this, men's suiting fastness can be obtained by intelligent color selection, which surpasses the fastness properties obtained with metallized colors on wool.

The most versatile color class on Dacron polyester fiber is the acetate dye class. At 212° F. certain of these show fairly good affinity, but most show poor penetration. At 250° F., however, full shades can be obtained in normal dyeing times.

As there are only ten to 12 commercial dye houses in the U. S. equipped for pressure dyeing on a small scale at the moment, most of you will ask, "How can we dye Dacron now without pressure equipment?" The best answer at the moment, outside of the Thermosol and molten-metal processes currently under development, is to resort to the use of carriers to swell the fiber and to permit dye penetration.

The ideal carrier for the dyeing of any fiber should be odorless, nonvolatile, nonflammable, nontoxic, water-soluble, effective in low concentration, have a low cost, and be easily removed at the completion of the dyeing. Volatile, noxious carriers should be used with extreme care so as to avoid harm to mill personnel. Carriers that have been recommended for Dacron or are now on the market have included proprietary formulas based on tetrahydronaphthalene, soaps, mono and polychlorobenzenes, o-phenylphenol, etc. We have recommended the use of benzoic and salicylic acids for light to medium shades, and ortho or p-phenylphenol for medium to heavy shades.

Our general experience has been that the nonvolatile carriers that remain in the bath completely through the dyeing cycle give better fiber penetration, which results in better wash fastness. The wet fastness of properly applied acetate dyes on Dacron approaches the fastness of vat dyes on cotton.

Our best black on Dacron polyester fiber has been produced with an inexpensive developed acetate black as follows: (1) Application of the base color (five per cent Acetamine Diazo Black RB Conc 150 per cent) in the presence of a swelling agent at a pH of 6-8 at a full boil over 1½ hours. (2) After a warm running rinse, the bath is dropped, and two per cent Acetamine Developer AD Extra is applied over one hour at the boil. (3) After a warm rinse, the base and coupling component on the fiber are simultaneously diazotized and coupled by use of ten per cent sodium nitrite and 15 per cent sulfuric acid, owf. Diazotization is started at 110° F., the temperature is raised to 200° F. (adequate ventilation), and the goods are run for one-half hour. (4) After being rinsed, the material is scoured for one-half hour at a boil with ten per cent caustic soda and two per cent Duponol D Paste to remove all loose color and carrier.

A number of Du Pont Naphthanil bases, applied by the same procedure, give excellent wet fastness and 20 to 40-hour light fastness in scarlet, maroon, burgundy and bordeaux shades. These bases can also be applied simultaneously with the developer.

Acetate dyes properly applied to Dacron polyester fiber show excellent fastness to fulling, hot-dry and hot-moist pressing, and decating. Consequently, acetate-dyed Dacron can be safely mill-processed after being blended with dyed wool. In addition, acetate-dyed Dacron can be blended with clean wool, spun into yarn and woven into fabric. Then the wool component can be cross-dyed with acid, Chromacyl or chrome colors without unduly affecting the strength or shade of the dyes on the Dacron or causing color migration to the wool.

Blends With Dacron Polyester Fiber

Blends of Dacron and wool can also be dyed in light and medium shades by a one-bath method in the presence of benzoic acid as a carrier with acetate dyes that show little staining on wool and with Chromycyl dyes for the wool. While men's suiting fastness can be obtained by this process, care must be exercised to prevent mottled effects on the fabric from the agglomeration of acetate dyes, which leads to poor crock fastness. Selected heavy shades can also be dyed by application of acetate dyes to the Dacron, followed by dolly-washing and cross-dyeing the wool with Chromacyl dyes.

Blends of Dacron and cellulosic fibers are best dyed by a two-bath process in which the Dacron is dyed first, followed by scouring to remove carrier and final application of direct or vat colors on the cellulosic fiber.

You will have noted that up to the present we have dealt only in general terms about dyeing at a boil, or at temperatures up to 250-260° F. under pressure. Little mention has been made of the Du Pont Thermosol or pad-steam process or of the hot-oil and molten-metal processes developed by other concerns. We feel sure that each of these dyeing procedures will contribute substantially to advancement in synthetic-fiber dyeing. In addition, new dyes being developed specifically for these fibers will give better dyeability and fastness properties.

Mr. Turnbull's paper was presented at Chattanooga, Tenn., during a recent meeting of the South Central Section of the American Association of Textile Chemists and Colorists. The names "Orlon" and "Dacron" are Du Pont registered trade marks for acrylic and polyester fibers, respectively. Whenever these names are used alone, it is to be understood that they stand for the generic names "acrylic fiber" and "polyester fiber," respectively.

Patent No. 2,548,899 has been issued to Homer V. Lang of Charlotte, N. C., for a warp dye beam. This invention covers a head end member for a warp dyeing meam which has an improvement in the form of a circular flange on the inner side thereof over which the perforated cylinder of the warp beam fits.

Patent No. 2,554,090 has been issued to Henry A. Dameron of Greenville, S. C., assignor to Greenville Steel & Foundry Co., also of Greenville, for continuous bleaching apparatus. This invention relates to continuous bleaching apparatus employing a J-shaped box and wherein the cloth. after being treated with bleaching materials, is passed through a steam chamber or boxes and then deposited into a J-box while live steam is being forced into the steam chamber and into the J-box for the cloth passing therethrough.

Maintenance, Engineering & Handling

Power Conversion From 440 To 550 Volts

By JAMES T. MEADOR, Professional Engineer – Part Two

IN continuation of the discussion in the March issue of TEXTILE BULLETIN about the case of the first mill change-over, we are taking up the problems confronted at their lower plant, where the operation took in 220, 440, and 550-volt current for power and 110 volts for control. This area included the main part of the plant which had a new 550-volt supply system throughout from the picker room on through spinning and the high-speed warper (which had been converted from 220 volts several months ago, and which required a motor rewind). The other areas included the dyehouse on 220 volts, the opening room on 220 volts, the vacuum stripper and baling press both on 220 volts, the boiler room on both 220 and 440 volts with 110 volts for control, and the cloth room, also on both 220 and 440 volts and with 110-volt control circuits. Now, let's talk about each one separately.

The dyehouse was operating on 220-volt power with two 15-horsepower and one five-horsepower motors on line-shaft drive, with magnetic starters and push button stations, and with 250-volt, fusible disconnecting switches. In the change-over to 550-volt supply, these motors were replaced with motors having 550-volt windings, and the holding coils replaced with 550-volt coils in the magnetic starters, while, at the same time, the overload relays were replaced with other relays correctly rated for the load at the 550-volt rating. The fusible switches were replaced with 600-volt switches of the proper ampere rating (as well as horse-power rating in accordance with the code).

The boiler room was another problem in that both the 220-volt and 440-volt power systems were being about equally loaded as far as horsepower of motors was concerned. The motors on both systems were across the line starting with 110-volt control circuit supplied from a separate source, which made it possible to use the same control for the new 550-volt system that was used on the 220-volt system by means of replacing only the overload relay heaters, inasmuch as the 110-volt holding coil was not bothered. Only the fusible disconnect switches required replacement by switches of the 600-volt class. The motors required rewinding and inasmuch as they were on a stand-by boiler, this was done during the week without incurring overtime labor and expenses. The 440-volt controls required only the replacement of the overload relays with those suitable for the motor ratings on 550 volts, inasmuch as the holding coils were on 110-volt supply same as above. These motors were not rewound but were connected directly as they were to the 550-volt circuit, in which case there was only a short period of time out being necessary while the relay heaters were being replaced. As the switches for this system were already of the 600-volt class there was no necessity for a change here, all of which enabled the boiler room with feed pumps, stokers and blowers being converted during straight time or week-day operation.

The next area up for discussion is the opening room, which was altogether operating on 220 volts, with all of the starting equipment being combination, fusible, magnetic starters, with the fuse clips arranged for 220-volt operation. The motors were dual-rated, 220-440 volts and being connected on the 220-volt winding with the control voltage being 110 volts from a separate source of power. The fusible combination starters were readily converted from 220-volt fuse clip arrangement to that for 600 volts by resetting them and inserting 600-volt fuses of the proper rating. Then the motors were connected on the 440-volt winding and connected directly to operate on the 550-volt circuit. In this case too the work was done during the week on straight time basis without the expense of overtime during a period when the opening room could be shut down for a few hours. The separate control circuit with parallel control from the hoppers in the picker room continued operation in a normal manner regardless of the change in the power voltage.

The warehouse circuit which supplied the 50-horsepower vacuum card stripper motor and baling press was on the 220-volt system, three-phase, with both moters being started by compensator starters and with 250-volt class switches. The only thing to do here was to rewind the vacuum stripper motor over the week-end to 550 volts, and replace the baling press motor with a similar motor having a 550-volt winding. The fusible disconnect switches were replaced by switches of the 600-volt class and lower ampere rating in accordance with the requirement of the horsepower ratings of the motors on the higher voltage. It was also necessary to change the auto-transformer coils in the compensators so as to obtain the proper starting voltage with the usual three selective taps, as well as the under-voltage release coils and the overload relay heaters, which completed the job with a minimum of inconvenience to the card room.

The next item to be discussed includes the cloth room, with the shearing machines and folders as well as the motor-driven inspection tables, where the small motors on the inspection table were on 220 volts and the power on the searing machines and folders were 440 volts and having control circuits of 110 volts from a separate source. It was no problem to rewind the 220-volt small motor to 550-volt rating and also replace the 250-volt switches with 600-volt switches with the proper rating inasmuch as the starters were all of the manually operated types, such as loom starters. The folders, having 440-volt motors, were connected directly to the 550-volt circuits with only the holding coils and the overload relay heaters being replaced with those of proper ratings for 550 volts.

Next, and of most importance, comes the problem of the Hermas shearing machines, which have more works than a dollar clock, yet operate very efficiently and satisfactorily on 440-volt power current, three-phase, with the control circuits of 110 volts from a separate source, in which case it was only necessary to replace the 440-volt holding coils and relay heaters with 550-volt coils and heaters of the proper rating for 550-volt operation. This work was done during the week-end from Saturday morning through Sunday night inasmuch as it was impossible to stop this machinery during the week.

There is another very important factor to be taken into consideration and to be thoroughly investigated and checked in the voltage change-over which was experienced on this job, and that is the matter of phase reversal relays on the elevators in the areas affected by the voltage change-over. Ordinarily if the transformer connections are not changed there would be no difficulty or problem of this kind but in this case it was necessary to change the service to the elevators from one bank to another, that is, from a 440-volt bank to a feeder supplying 550 volts from a separate bank, which is the reason for the occurrence. So, it is very important to keep this factor of elevator service in mind during any kind of a voltage change-over, even though the same relative tap connections are used on the replacement transformers (550 volts) that were used on the 440-volt transformers.

Another factor about this elevator business is to have an adequate supply of 550-volt brake coils for use with these elevators as they are converted inasmuch as they have a probability of shooting to ground or otherwise giving trouble at the most unexpected moment under such conditions.

All of this voltage change at the lower plant enabled the master mechanic to remove several poles from the mill yard, as well as take down several old and unsightly transformer banks and really greatly improve the appearance of the property.

In the May issue of TEXTILE BULLETIN we expect to bring you Part 1 of a series of articles covering conversion of primary power from a low 2,200 volts to the higher and more enthusiastic voltage of 4,160 volts, Y-connected, three-phase, four-wire. We expect also to tell you problems involved and the benefits received from such a conversion.

Towmotor Items Described In Broadsides

Towmotor Corp., Cleveland, Ohio, manufacturer of fork lift trucks, in addition to its standard literature on materials handling equipment and accessories, has developed a special series of broadsides designed to explain specific points of interest to various groups of individuals concerned with materials handling problems and the use of fork lift trucks.

Engineers, for example, while probably interested in every phase of fork lift operation, are likely to be particularly concerned with the construction features of a fork lift truck—its structural strength, body design, location of controls, and similar information. Mechanics, on the other hand, obtain greater value from information about the unit's power plant, engine life, engine performance. Still another group—purchasing agents, traffic managers, plant superintendents—want specific data on how long a fork lift truck can stand up, why it can cut handling costs, what its maintenance problems might be.

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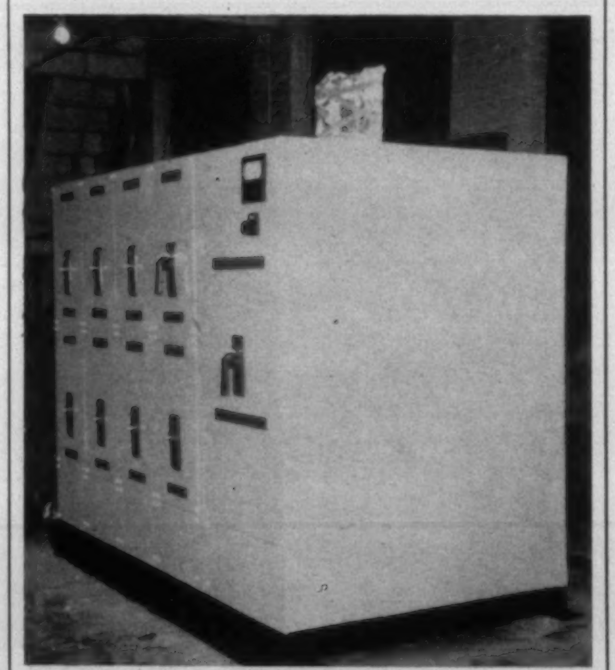

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PERSONAL NEWS

Julian T. Hightower recently was elected president of Thomaston (Ga.) Mills, becoming the third son of the company's founder, R. E. Hightower, Sr., to hold the presidency. An active member of the organization since being graduated from the Georgia Institute of Technology in 1919, Mr. Hightower was elevated from the position of executive vice-president in charge of manufacturing.

Donald Comer Day will be observed April 30 in Sylacauga, Ala., honoring Mr. Comer, chairman of the board of Avondale Mills, Inc., Sylacauga. The event will be in the nature of a barbecue dinner with an attendance of between 10,000 and 12,000 expected.

William B. Shuford, prominent textile executive of Hickory, N. C., recently announced his candidacy for the N. C. Senate from the 25th Senatorial District. . . . R. L. Stowe, 86, pioneer textile executive of Belmont, N. C., has filed for re-election as chairman of the Gaston County Board of Commissioners. He has been chairman of the board since 1922. . . . Warren R. Williams, president and general manager of Father George Mills, Sanford, N. C., has filed notice of his candidacy for the N. C. Senate from the 13th district. Mr. Williams is a former mayor of Sanford, having served in that post for 20 years. . . . R. Grady Rankin of Gastonia, N. C., president of Superior Yarn Mills, Mount Holly, N. C., has filed notice of his candidacy for renomination to the N. C. Senate. He is running for his sixth term.

Claude F. Snider *(left)*, a director and secretary of the Draper Corp. for 11 years, has been elected treasurer of the firm to succeed B. H. Bristow Draper, treasurer for the past ten years, who has resigned from active duties in the corporation in order to devote more time to his other business interests. Mr. Snider has been associated with the Draper concern since 1931. Mr. Draper will continue as a director.

R. O. Arnold, president of Covington (Ga.) Mills, recently was re-elected as chairman of the board of regents of the University of Georgia system. A graduate of the University of Georgia, Mr. Arnold long has been active in university and alumni affairs.

William Muir, vice-president in charge of manufacturing, and Frank S. Connett, treasurer of American Woolen Co., have been elected directors of the firm. Mr. Muir was elected to a three-year term and Mr. Connett for two years.

J. C. Whitt has resigned as superintendent in charge of dyeing for the Century division of Standard Hosiery Mills, Burlington, N. C., to become assistant superintendent in charge of dyeing at the National Plant of Standard-Coosa-Thatcher Co. at Chattanooga, Tenn., yarn manufacturer, mercerizer and dyer.

William E. Conlon has joined Products Sales, Inc., Whitman, Mass., where he will be in charge of the sales of Climax rollers, Nylube bolsters and other equipment for cotton and worsted preparatory machinery. Before joining Products Sales, Inc., Mr. Conlon was associated with Texaplant Corp. and Arlind Corp., Stamford, Conn.

L. H. Rice, general manager and a director of Anchor Rome Mills, Inc., Rome, Ga., recently was presented a certificate as the "outstanding citizen" of Rome for 1951 at the annual Chamber of Commerce dinner. Mr. Rice is a director of the Chamber of Commerce and is active in the Rome Red Cross chapter.

Lewis S. Morris has been named assistant secretary of Cone Mills Corp., Greensboro, N. C. All other officers and directors were re-elected. . . . Marshall Gardner has been promoted from superintendent to manager of the print works plant of Cone Finishing Co., Greensboro, a subsidiary of Cone Mills Corp. Other promotions at the print works plant include those of Gordie Boyd from assistant superintendent to superintendent to succeed Mr. Gardner; George Brandt, Jr., from head of the color shop to succeed Mr. Boyd as assistant superintendent; and appointment of Roy Phillips to succeed Mr. Brandt as head of the color shop.

W. E. Prescott, purchasing agent for Kendall Mills, Charlotte, N. C., has been elected a vice-president of the Charlotte Sertoma Club.

Dr. Frederic Bonnet of American Viscose Corp., for his achievements in the field of textile fiber utilization, was presented the Harold DeWitt Smith Memorial Medal March 20 at the semi-annual meeting of Committee D-13 on textiles of the American Society for Testing Materials. The medal was presented by W. D. Appel, chief of the textile division of the National Bureau of Standards, and chairman of Committee D-13. Dr. Bonnet also was presented an inscribed scroll in recognition of his outstanding achievements in the dissemination of fundamental knowledge of textile fibers and their utilization.

Jack T. Holt has succeeded C. F. Williams as purchasing agent for Erwin Mills, Inc., Durham, N. C. Mr. Williams, purchasing agent since 1947, retired recently after 36 years with the company. Mr. Holt has been assistant purchasing agent for the past 18 years.

D. D. Quillian, general manager of the Athens, Ga., division of Chicopee Mfg. Corp., recently was elected president of the Athens Country Club.

I. W. Leggett has been named manager of the Charlotte, N. C., branch of Worthington Pump & Machinery Co. Mr. Leggett joined the firm in 1930 following his graduation from N. C. State College. Before his recent appointment he worked in the company offices in Atlanta, Ga., and Harrison, N. J.

B. W. Whorton, vice-president of Dixie Mills, Inc., LaGrange, Ga., recently was re-elected to serve on the Regional Executive Committee in Section 4, Boy Scouts of America. Mr. Whorton was praised for the time he has given and the interest he has shown in this work.

Harrison C. Givens, Jr., formerly manager of the Amcelle plant of Celanese Corp. of America, has been promoted to the newly-created post of manager of acetate plant operations for Celanese. He will have charge of operations of plants in Cumberland, Md., Rock Hill, S. C., Narrows, Va., and Burlington, N. C. He will make his headquarters in New York City. . . . L. Leslie Helmer, who has been assistant to Mr. Givens, was named as his successor at the Amcelle plant.

David S. Williams *(left)* has been elected president of Graton & Knight Co., Worcester, Mass., succeeding his father, Arthur A. Williams, who is chairman of the board. Mr. Williams became associated with the company eight years ago and for the past few years has been serving as executive vice-president.

T. Henry Wood retired last month as general manager of Oconee Mills, Westminster, S. C., and Sachem Woolen Mills, Winder, Ga., both subsidiaries of Beacon Mfg. Co. He will continue to serve Beacon in an advisory capacity.

J. Carlisle Martin, formerly manager of the Atlanta, Ga., sales office of H & B American Machine Co., has joined the sales staff of Whitin Machine Works. Mr. Martin will work out of the Atlanta office for Whitin, representing the firm in Tennessee, Georgia, Alabama, Mississippi, Arkansas and Texas.

John Harden, a vice-president of Burlington Mills Corp., Greensboro, N. C., has been elected president of Greensboro Industries, Inc., an association whose objective is to create better community-industry and employer-employee relations.

John Wilson, formerly a salesman for General Dyestuff Corp., Providence, R. I., has been named general manager of field service for textile finishing and printing at Owens-Corning Fiberglas Corp., Cumberland, R. I.

Frank C. Donofrio of Troy, N. Y., has been appointed a textile chemical sales engineer for Monsanto Chemical Co.'s Merrimac division. A graduate of St. Lawrence University with a bachelor's degree in chemistry (1943), Mr. Donofrio has had extensive experience in the textile chemical field. He is a member of the American Chemical Society and the American Association of Textile Chemists and Colorists.

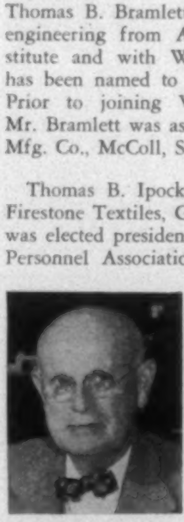
Appointment of Dr. Howard W. Swank to the newly-created post of production manager in the manufacturing division for Dacron polyester fiber, was announced March 7 by the Du Pont Co. . . . Edgar H. Bleckwell, manager of the Chattanooga, Tenn., nylon plant, was promoted to succeed Dr. Swank as nylon technical manager at Wilmington, Del. William H. Thalheimer, manager of the Yerkes rayon plant at Buffalo, N. Y., was appointed manager of the Chattanooga plant to succeed Mr. Bleckwell. Dr. Rollin F. Conaway, assistant manager of the Spruance rayon plant at Richmond, Va., will become manager of the Yerkes plant. All changes are in the textile fibers department and became effective March 17.

Herbert R. Schwarz has been named to the newly-created post of director of research and fabric development at Wellington Sears Co. Mr. Schwarz has been with the firm since his graduation from Massachusetts Institute of Technology in 1935.

Gerald W. Porter has resigned as manager of the Forsyth division plant of the Duplan Corp. at Winston-Salem, N. C., and has been succeeded in that post by C. Z. Taylor, who has been manager of the Cleveland, Tenn., division.

John H. Hampton, after 41 years of service with West Point Mfg. Co., recently was retired as overseer of spinning at the Fairfax, Ala., plant of West Point Mfg. Co., a position he had held since 1921. . . . Thomas B. Bramlett, a graduate in textile engineering from Auburn Polytechnic Institute and with West Point since 1948, has been named to succeed Mr. Hampton. Prior to joining West Point Mfg. Co. Mr. Bramlett was associated with Plymouth Mfg. Co., McColl, S. C.

Thomas B. Ipock, personnel director at Firestone Textiles, Gastonia, N. C., recently was elected president of the Gaston County Personnel Association.



Claude Dawson, prominent textile executive of Cramerton, N. C., was honored April 8 when a new bridge spanning the South Fork River at Cramerton was dedicated the Claude Dawson Bridge in his honor. Mr. Dawson currently is executive secretary of the Southern Combed Yarn Spinners Association but served for many years as general manager and vice-president of Cramerton Mills, which in 1946 became a division of Burlington Mills Corp. Mr. Dawson retired from active management duties with the firm in 1950.

Franklin H. Kissner recently was elected controller of Lever Bros. Co., New York. He has been vice-president of Burlington Mills Corp.

L. E. Gatlin, Jr., a native of Newberry, S. C., and a graduate of Clemson College, has been named manager of Plant No. 7 of Erwin Mills, Inc., at Neuse, N. C. Prior to accepting his new position Mr. Gatlin was for 15 months associated with Dan River Mills, Danville, Va. His other previous associations include Pacific Mills, M. Lowenstein & Sons, and Beaunit Mills.

Dwight B. Billings was elected treasurer of Pacific Mills, 102-year-old textile organization, at the company's annual meeting of stockholders in Boston last month. This followed an announcement by Henry M. Bliss, who has been both president and treasurer, that he was relinquishing the treasurership and in the future would devote his entire energies to the presidency. . . . Theodore R. Peary, who has been with the company since 1942, was elected secretary and clerk to succeed Mr. Billings and will continue as controller. Roger C. Damon and Marion S. Francis were elected to the board of directors. Mr. Damon is vice-president of the First National Bank of Boston and Mr. Francis is a member of the law firm of Bryan, Cave, McPheeters & McRoberts of St. Louis, Mo. Other directors and officers were re-elected.

W. Roy Thompson has been promoted from assistant foreman on the second shift to foreman of the napping department at the finishing mill of Fieldcrest Mills at Spray, N. C. . . . Other promotions at the finishing mill include that of W. J. Tucker from second hand to assistant foreman on the second shift, and the promotion of Harry Wray from section hand on the second shift to second hand succeeding Mr. Tucker.

J. J. Strater has resigned as superintendent of McCallum & Robinson, Inc., Memphis, Tenn., to accept a position as superintendent of Herron Yarn Mills, Inc., also of Memphis.

Donald Comer, chairman of the board of Avondale Mills, Sylacauga, Ala., and Julian T. Hightower, president of Thomaston (Ga.) Mills, recently were elected directors of the Central of Georgia Railway Co.

Bruce Bozeman, overseer of the card room at the Manchester, Ga., plant of Callaway Mills Co., has been elected president of the Chattahoochee Valley Alumni Chapter of Phi Psi textile fraternity.

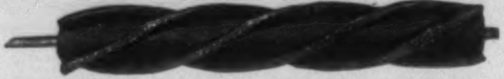
Fred W. Fraley of Cleveland, O., and Dr. George E. Holbrook of Wilmington, Del., have been appointed deputy directors of the National Production Authority's chemical division. Mr. Fraley is vice-president in charge of sales for Diamond Alkali Co. and Dr. Holbrook is assistant director of the development department of E. I. du Pont de Nemours & Co., Inc.

Marion Woods has joined Watson & Desmond, Charlotte, N. C., and will represent the firm in South Carolina working out of the Greenville office. Mr. Woods was graduated from Clemson College in 1945. With the exception of a short while in the mill, he has been in the textile used machinery and supply business.

Frank B. Bradley has resigned as vice-president and general manager of Eagle & Phenix Mills, Columbus, Ga., a division of Fairforest Co., a subsidiary of Reeves Bros., Inc. Mr. Bradley has been executive vice-president since 1947, when the plant was sold to Reeves Bros. by the W. C. Bradley interests. Previous to that, Mr. Bradley was vice-president and general manager of Eagle & Phenix Mills from 1930.

Appointment of Norman A. Cocke, Jr., as assistant district sales manager, and Mas-

PEGGED and GLUED BRISTLES Stay Put!



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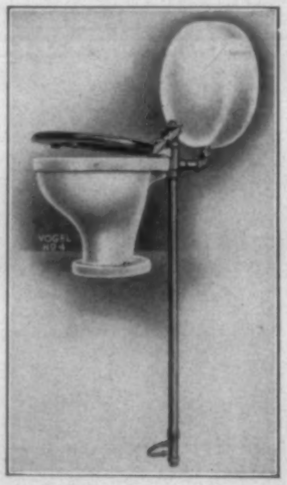

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For Factories, Schools, Institutions, Farms and Comfort Stations. These durable syphon-action closets are simple in construction with few moving parts and no mechanism in the tank to get out of order. They represent the ultimate in economy... both in water consumption and upkeep.

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The No. 14 is designed for Mills, Factories and Industrial Plants which do not require complete frost-proof protection. The No. 14 has a vitreous china bowl and is made of the same long-wearing materials for which all Vogel Products are noted.

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VOGEL PRODUCTS

ten R. Dalton as district head of staple sales, was announced recently by Henry K. Kelly, Southern district sales manager of American Viscose Corp. Mr. Cocke has been associated with the Avisco sales organization in Charlotte since 1939, except for five years with the U. S. Army antiaircraft service in North Africa. He was graduated as a chemical engineer from Massachusetts Institute of Technology in 1936, and for three years was connected with Calco Chemical Co., Bound Brook, N. J. Mr. Dalton joined the chemical research department of American Viscose in 1946 and in 1950 was transferred to the Charlotte, N. C., district sales office. He was graduated in chemistry by the University of North Carolina in 1941 and for a year was connected with General Chemical Co., Newell, Pa. . . . Avisco has established a new sales division to handle distribution of rayon tire yarn, tire cord and tire fabric, and Frank T. Williams, formerly assistant manager of the viscose filament rayon yarn sales division, has been appointed to head the new division. Mr. Williams was graduated from Dartmouth College in 1929. He joined American Viscose Corp. in 1941 and has since served as a member of the corporation's selling organization.

Benjamin Fisher has been elected secretary and clerk of the Kendall Co. succeeding James A. Valentine who has served in both capacities in this and predecessor companies for the past 34 years. Mr. Valentine continues as a director. Mr. Fisher has been associated with the company since 1925, serving as assistant secretary since 1946 and more recently as assistant treasurer. He continues in the capacity of assistant treasurer. . . . Robert E. Gregg was elected divisional vice-president of the Kendall Mills division, Walpole, Mass. Mr. Gregg joined the company in 1930, becoming successively manager of its dry goods department in 1935, manager of the New York sales office in 1940, and general sales manager of the division in 1950.

Charles W. Jones has been transferred from the Memphis, Tenn., offices of the National Cotton Council to Washington, D. C., as assistant to the Washington representative. Mr. Jones has been on the council staff since 1948.

Hyman H. Field has been named assistant manager of the Charlotte, N. C., office of the organic chemicals department of E. I. du Pont de Nemours & Co., Inc. James D. Sandridge was appointed assistant to the manager and M. D. Haney, Jr., was appointed sales supervisor, fine chemicals. . . . Joseph Dienet, considered by many as one of the world's leading vat dye specialists, retired March 31 after more than 25 years of continuous service with the Du Pont Co. Mr. Dienet makes his home at Glassboro, N. J.

Frank B. Lutz, recently with Millville Mfg. Co., and Charles H. Apperson, previously with Tennessee Coal & Iron Co., have joined the Chemstrand Corp., Decatur, Ala., in the research and development department. They will be associated in research activities with Joseph T. Chesnutt, William S. Moore, Cloyce L. Purdom and Carlton D. Whitt who are engaged in the company's research and development activities at Decatur. Other technical personnel are located at Marcus Hook, Pa., Springfield, Mass., and Dayton, Ohio.

William H. Steinkamp has been appointed sales manager of the industrial division of Minneapolis-Honeywell Regulator Co. Mr. Steinkamp has been industrial field sales manager since 1943. He succeeds L. Morton Morley, who continues as vice-president of the Brown Instruments division and who will assume greater responsibilities concerning division policies and other company matters arising from the accelerated demand for industrial instrumentation. A graduate of New York University in 1928, Mr. Steinkamp joined the Brown division in 1930 as field sales engineer, and has represented the Brown division in New York, Buffalo, Cleveland and Pittsburgh, where he served as branch manager.

J. M. McNamee has been appointed sales representative for American Cyanamid Co.'s industrial chemicals division in the Georgia and Florida district. He assumed his new position April 15, and operates out of Atlanta. Joining Cyanamid in 1950 at the Stamford Research Laboratories, Mr. McNamee was later transferred to the New York office where he has been serving as a technical representative for the synthetic organic chemicals department. He is a graduate of Tufts College, Medford, Mass., with B.S. and M.S. degrees in chemistry.

Thomas N. Ingram of the American Cotton Manufacturers Institute staff has been elected a vice-president of the newly-formed Charlotte (N. C.) Chapter of the Society for Advancement of Management. Named to the group's advisory board were E. A. Terrell of Terrell Machine Co., David Johnston of Johnston Mills Co. and John Watlington of Wachovia Bank & Trust Co.

Dr. C. W. Gayler, formerly with American Viscose Corp., has been appointed technical superintendent of the Chemstrand Corp. nylon plant now under construction at Pensacola, Fla. . . . Other recent appointments at the Pensacola plant include that of L. E. Dequine, Jr., as plant engineer, Louis F. Ray as superintendent of intermediates, and Paul W. Runge, chief chemist.

Bruce S. Galbraith has been appointed sales representative of the fungicide division of Nuodex Products Co., Inc., makers of chemical additives for the textile industry. Mr. Galbraith will have his headquarters at the company's Elizabeth, N. J., offices and will contact the textile trade, rendering technical assistance to users of fungicides. A graduate of Seton Hall College, he was previously a sales representative for American Agricultural Chemical Co.

William P. Wright, Jr., of Greenwood Mills, Inc., has been named temporary chairman of the new public relations and publicity committee of Worth Street, Inc., "Textile Center of the World." The following will serve with Mr. Wright on the com-

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mittee: George Beyer, Cannon Mills, Inc.; George V. Cooper, Bates Fabrics, Inc., John Little, Wellington Sears Co., Inc.; Edward Russell, Southeastern Cottons, Inc.; Charles Schroeder, Reeves Bros., Inc.; and Dan H. Woodward, Cone Export and Commission Co., Inc. Worth Street, Inc., consists of a growing number of firms in the downtown textile district who have joined together for the advancement and improvement of the historic central marketplace of the textile industry in New York.

Joseph B. Evans, director of sales for Dexter Chemical Corp., New York, recently was appointed to the regional advisory committee, Small Defense Plants Administration. He will serve Region II, including the states of New York and New Jersey.

Dr. Lyman E. Fourt has been appointed manager of physics research at Harris Research Laboratories, Washington, D. C. Dr. Fourt has been with the laboratories since their inception in 1945 and previous to that he was associated with Dr. Harris at the research fellowship of the Textile Foundation at the National Bureau of Standards.

R. S. Dickson of Charlotte, N. C., president of American Yarn & Processing Co., Mt. Holly, N. C., was re-elected president of the North Carolina Citizens Association at a meeting of the group March 19 in Raleigh.

OBITUARIES

Adam Clement, 44, of Charlotte, N. C., vice-president of Barnhardt Bros. Elastic Corp., Charlotte, and Southern Webbing Mills, Inc., Greensboro, N. C., died April 1 of a heart attack. Surviving are his wife, two daughters, and several brothers and sisters.

Amory Coolidge, 57, of Dedham, Mass., a director and former executive vice-president of Pepperell Mfg. Co., died April 2 at a hospital in Boston, Mass. He served as executive vice-president of the company for about ten years, leaving that post in 1947. Surviving are his mother and two brothers.

Dr. George W. Filson, 51, special assistant to the general manager of the textile fibers department, E. I. du Pont de Nemours & Co., Inc., died March 15 at a hospital in New York City after a lengthy illness. Dr. Filson had been associated with Du Pont since October, 1929. Surviving are his wife and three daughters.

Walter C. Crain, 44, manager of Crawford & Garner, Inc., Spartanburg, S. C., firm dealing in textile specialties and industrial supplies, died suddenly March 19. Mr. Garner, a graduate of Clemson College, had been with the firm since its organization in 1950.

Philip C. Jackson, 45, for 18 years a partner in Jackson & Smith, Gastonia, N. C., dealers in textile mill stocks, died recently of a heart attack. He sold his interest in the stock firm in 1949. His wife, a son and a daughter survive.

John E. Kinsey, 67, died recently of a heart attack in Greenville, S. C., his death occurring less than two weeks after his arrival in Greenville to become associated with Blackinton Mills, Inc., at nearby Conestee, S. C. He was a native of England. Prior to accepting a post with Blackinton Mills, Mr. Kinsey was overseer of Yantic Woolen Co., Norwich, Conn. Survivors include his wife and two sons.

George N. Murray, 57, vice-president and treasurer of Lowell Bleachery South, Griffin, Ga., died April 2 at his home in Griffin after a lengthy illness. He was also a director of Dundee Mills, Inc., and Rushton Cotton Mills. Surviving are his wife, three sons, his mother, a brother and a sister.

W. W. Norman, vice-president and treasurer of Dundee Mills, Inc., Griffin, Ga., died March 30 after having been in declining health for two years. He joined the former Georgia Cotton Mill, later to become Dundee Mills, in 1918 as a bookkeeper. He was a director of Lowell Bleachery and a trustee of the Dundee Community Association. His wife and a daughter survive.

Edward F. Parks, 85, retired director of Universal Winding Co., died recently in Providence, R. I. Mr. Parks worked closely with Simon W. Wardwell in the invention of the first modern winding machine. The machine, which bears Mr. Wardwell's name, is in the Smithsonian Institute in Washington.

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William G. Perry, Jr., 63, former partner in the J. E. Sirrine Co., Greenville, S. C., died March 28. Surviving are his wife, a son and a daughter, two brothers and two sisters.

Anthony J. Pischel, 51, treasurer and credit manager of Joshua L. Baily & Co., Inc., New York, died recently following a lengthy illness. Mr. Pischel joined Joshua L. Baily in 1924 and was made treasurer

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OBITUARIES

about ten years ago. He is survived by his wife and two sons.

William T. Rankin, 53, vice-president of Textiles, Inc., Gastonia, N. C., died suddenly April 4 at his home in Gastonia. In 1922 Mr. Rankin joined his father in the operation of an organization of textile plants that included the Osceola, Hanover and Mountain View mills. He joined Textiles, Inc., on its organization in 1933 and was made vice-president about five years ago. Surviving are his wife, one son and two sisters.

Nelson M. Smith, 57, former official of Smith, Drum & Co., Philadelphia, Pa., textile machinery manufacturer, died March 14. He was assistant treasurer of the firm until his retirement about 15 years ago. At the time of his death he was a stockholder in the company. Surviving are his wife, a son and a daughter.

Walter C. Taylor, 62, who was secretary-treasurer of the Southern Textile Association at Charlotte, N. C., from 1929 to 1933, died recently at his home in Washington. At the time of his death he was an official with the National Production Authority. He is survived by his wife, one son and a sister.

E. S. Trammell, 74, retired textile mill superintendent of Woodruff, S. C., died recently at his home in Woodruff. Surviving are his wife, six daughters, three sons and one sister.

John C. Turner, 64, of Atlanta, Ga., for the past 25 years Southeastern representative for Charles Bond Co., Philadelphia Pa., died suddenly while attending the recent annual convention of the Alabama Cotton Manufacturers Association at Biloxi, Miss. Mr. Turner, a lifelong resident of Atlanta, was associated with Anderson, Clayton & Co., as a cotton classer before joining Charles Bond Co. His wife and three brothers survive.

MILL NEWS

CONSTRUCTION. NEW EQUIPMENT. FINANCIAL REPORTS. CHARTERS. AWARDS. VILLAGE ACTIVITY. SALES AND PURCHASES

ATLANTA, GA.—Exposition Cotton Mills Co. observed its 70th anniversary April 5. The company was organized following the great International Cotton Exposition held in Atlanta in 1881. On April 5, 1882, the buildings, which were to stand as a "permanent, living monument of the exposition," were opened as Exposition Cotton Mills Co.

GREENWOOD, S. C.—The National Production Authority last month approved construction of a $6,821,529 cotton fabrics mill here by Greenwood Mills Co.

MARION, N. C. — Plans have been announced for construction of a two-story addition to Cross Cotton Mills Co. The first floor of the 78 by 167-foot building will be used for rewinding and conditioning dyed yarns. The second floor will be used for yarn storage. The addition is expected to be completed by Fall.

NEW YORK, N. Y.—United Merchants & Manufacturers, Inc., recently borrowed five million dollars from Metropolitan Life Insurance Co. on a promissory note. It is reported that proceeds of the 3¾ per cent loan will go into working capital.

ASHEBORO, N. C. — Work has been started on an addition to the Cetwick plant of Burlington Mills Corp. here which will provide 10,000 square feet of floor space. The addition will be of brick and steel and is scheduled for completion sometime in July. The plant employs about 150 people and processes nylon yarn.

NEWNAN, GA.—A voluntary petition in bankruptcy was filed last month by Fullerton Cotton Mills, Inc., in U. S. District Court at Atlanta, listing liabilities of $551,671 and assets of $280,721. Unsecured claims total $494,663. The case was referred to Referee Rowell Stanton at Rome, Ga.

NEW YORK, N. Y.—Collins & Aikman Corp., weaver of unholstery fabrics, will absorb Stead & Miller Co. at the end of this month, it is reported. Stead & Miller, also a producer of unholstery fabrics, operates mill at Concord, N. C. Collins & Aikman, with executive offices in New York, has research facilites and mills in Philadelphia, Pa., Bristol, R. I., Norwood and Roxboro, N. C., and in Canada.

KINGSTREE, S. C.—The National Production Authority last month granted approval for construction here of a $1,089,132 weaving mill for worsteds, woolens and Dacron polyester fiber for Delaware Falls Co. Delaware Falls Co. is reported to be affiliated with Princeton Worsted Mills, Trenton, N. J., weaver of fabrics of 100 per cent Dacron.

PALMER, PUERTO RICO—Puerto Rico has taken another step forward in the development of a completely integrated textile industry with the completion of a new dyeing, printing and finishing plant by the Rich Port Finishing Corp. at Palmer, Puerto Rico. The factory is equipped to dye, print and finish virtually all kinds of textiles, including cotton, silk, rayon, nylon and knitted goods. The plant was built by the Puerto Rico Industrial Development Co. It covers about 12,400 square feet and cost in the neighborhood of $40,000 for the building alone. The new plant adjoins that of the Beacon Textile Mill and will use some of Beacon's floor space for its operations. Rich Port Finishing Corp. expects to have a total staff of approximately 200 workers by the time operations are at normal level. The company began operations on Feb. 25, 1952, but does not expect to reach full normal production for some three or four months. Normal capacity will be from 1,400,000 to 1,800,000 yards of finished products per month. This capacity is more than enough to process all the textiles produced in Puerto Rico and the new plant will dye, print and finish some goods shipped to Puerto Rico from the United States. The establishment of a dyeing, printing and finishing plant in Puerto Rico was the logical final step in setting up in the island a fully integrated textile industry. Pioneer in textiles in Puerto Rico was Textron of Puerto Rico, Inc., located in the city of Ponce, on Puerto Rico's southern coast. Textron's product has, up to the present time, been shipped to the mainland for dyeing, printing and finishing. However, important as it may be to the island's textile industry, the new finishing plant at Palmer will have little effect on the industry in the United States. The five textile mills of Puerto Rico produce only about 20,000,000 yards of cloth per annum and employ less than 1,000 workers altogether.

GREENSBORO, N. C. — Burlington Mills Corp. has acquired the stock interests of two principal officers of National Mallinson Fabrics Corp. and will submit a proposal to the remaining Mallinson stockholders for the rest of the stock, it was announced recently by J. C. Cowan, Jr., Bur-Mil president. Mallinson is one of the leading rayon and synthetic converting firms in the textile business, being particularly noted for the development of fashion fabrics. It operates a throwing and weaving plant at Buena Vista, Va. Burlington has acquired the holdings of Charles L. Gerli, president and Jackson E. Spears, vice-president of Mallinson. The stock was acquired on a price per share basis of one share of Burlington Mills common stock for each share of National Mallinson Corp.'s common stock held by Messrs. Gerli and Spears. A proposal will likewise be submitted to all the remaining stockholders of Mallinson whereby they will in effect have the opportunity to acquire Burlington common stock on the basis of one share of Burlington for each share of Mallinson held by them. Mr. Cowan said that it is the intention of Burlington Mills to utilize to the fullest extent the merchandising and development talent, distribution facilities and personnel of National Mallinson as a part of the Burlington sales organization, with Messrs. Gerli and Spears to become vice-presidents of Burlington Mills Corp. of New York, the concern's selling organization.

KINSTON, N. C.—A group of Kinston businessmen have formed a corporation to build houses for personnel who will work at the new Du Pont plant now under con-

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These new pocket-size precision instruments with dampening device enable you, your workers and overseers to detect faulty tensions that cause tight and loose ends. They are used:

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IN WINDING—to adjust swifts uniformly.
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LUBRONZE
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BACK BEARINGS

It's a combination, designed by Dixon engineers, to reduce oiling time and labor costs . . . to promote economical, continuous and dependable saddle operation in long draft spinning.

The Slixonice back saddle incorporates special, long-lasting, low-friction plastic bearings instead of cast iron. After a long period of use, only the plastic inserts need be replaced — not the entire saddle.

When used on either H & B, Whitin or Saco-Lowell long draft systems, back roll lubrication and the danger of oil-soaked yarn are completely eliminated. The streamlined design of the Slixonice saddle reduces lint accumulation and permits accurate control of roll speed and weighting.

Use of the Lubronze bearing in the Dixon front saddle reduces front roll lubrication to a minimum. The bronze insert is impregnated with graphite, oil and other materials to provide a smooth bearing surface, low friction and a reserve of lubrication for extra protection.

See your Dixon representative for full information on how old saddle types can profitably be replaced by the Dixon Slixonice-Lubronze combination. It will also be well worth your while to ask him about the complete Dixon line of saddles and saddle assemblies.

SOUTHERN SALES:
R. E. L. Holt, Jr. & Associates, Box 1474, Greensboro, N. C.
Covering the Carolinas and Virginia
J. W. Davis, Mfg'rs. Agent, Box 745, Columbus, Ga.
Covering Georgia, Alabama, Mississippi, Louisiana and Tennessee
NORTHERN SALES:
W. R. Potter, Sales Manager, Dixon Lubricating Saddle Co., Bristol, R. I.
Covering New England

DIXON
Established 1876
LUBRICATING SADDLE CO.
BRISTOL, R. I.

struction here. This is reported to be a partial answer to a request by Du Pont for at least 280 housing units by July, 1953. Fifty-six homes will be needed in the immediate future.

MOORESVILLE, N. C. — The new C-4 weave room at Mooresville Mills is expected to be in full operation by September. One hundred thirty-two modern 72-inch C-4 looms, adaptable to automatic or pick and pick styling, have been installed and 70 are in operation. An additional 68 looms are scheduled to be installed and in operation by September. With the addition of the 200 C-4 looms, Mooresville Mills will have a total of 2,114 looms in operation.

CHARLOTTE, N. C.—Directors of American Yarn & Processing Co., Mt. Holly, N. C., and Efird Mfg. Co., Albemarle, N. C., recently voted to recommend to stockholders the merger of the two companies into one corporation to be known as American & Efird Mills, Inc.

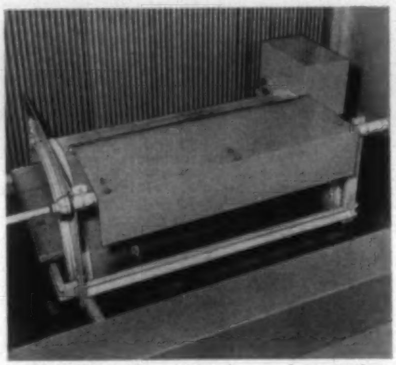
CARTERSVILLE, GA.—Goodyear Tire and Rubber Co. has awarded a contract for design and construction of a large, air conditioned, windowless manufacturing building at its Cartersville plant. The contract for the structure was let to the Wigton-Abbott Corp., of Plainfield, N. J. To be 299 by 280 feet, the new building will feature six large semi-penthouse structures to house the complicated air-conditioning equipment necessary to maintain strict temperature control. Goodyear officials said construction of the modern new building would get under way "immediately."

WORTH STREET, INC., "Textile Center of the World," has made public copies of the official seal of the new organization designed for use of members in their advertising, on letterheads, and otherwise. "This seal is made available to all members of Worth Street, Inc., as evidence of their determination to join in the advancement and improvement of the downtown New York textile merchandising center," Stanley Phillips, president of Cannon Mills, Inc., and chairman of the new organization's public relations committee stated. "It is an evidence of their confidence in the future of the area and its business potentialities, for their own firms and for the general market-place." Arrangements for use of the seal, it was stated, may be made with H. S. Van Ingen, managing director, at the offices of Worth Street, Inc., 40 Worth Street, New York. Membership requests may also be made. A membership drive is now in progress.

For the Textile Industry's Use

EQUIPMENT — SUPPLIES — SERVICES — LITERATURE

Automatic Suction Strainer



The Type B automatic suction strainer has been developed for textile central station air conditioning systems by the Bahnson Co., Winston-Salem, N. C. A self-cleaning rotary strainer, the unit prevents accumulation of lint in air washers by removing lint from all water circulated, collecting it, and disposing of it automatically. Located in the washer tank, Type B strainers prevent clogging of spray nozzles, thus reducing maintenance costs, increasing washer efficiency, and allowing uninterrupted operation. Single standard units are effective for washers handling up to 110,000 cfm, multiple installations are made for larger washers. Units are easy to install and require little attention since they dispose of lint automatically. Each strainer is controlled by an automatic timer and driven by a one-quarter horsepower motor. Straining screen is of perforated stainless steel, all other parts have corrosion resistant finish. Complete information is available in Bahnson Bulletin 19A.

Watson & Desmond, Inc.

Watson & Desmond, Inc., a North Carolina corporation, has been formed to handle textile mill properties and used machinery. Officers of the company are S. P. V. Desmond, president; J. N. Dodgen, vice-president; Miss A. L. Patterson, secretary; C. E. Watson, treasurer. The company will share offices with Watson & Desmond, 301½ West Fourth Street, Charlotte, N. C. The partnership of Watson & Desmond, Charlotte, with offices in Gastonia, and Greensboro, N. C., and Greenville, S. C., and Lanett, Ala., will continue as formerly handling textile mill supplies and accessories.

New Type Cloth Folder

Hall & Jansson Co. of 177 Highland Street, Worcester, Mass., announces a new type of cloth folder with air operated table and jaws. The main features of this air type cloth folder are the pivoted air cylinder, the use of steel tubing for connections between the cylinder and the table irons, and the use of rectangular steel tubing for the table irons.

The new pivoted air cylinder almost entirely reduces the side thrust of the piston against the cylinder walls, so that shutdowns to replace packing and the cost of repacking are materially reduced. The replacement of cast iron by light, stiff tubing for the yokes and table irons has eliminated much of the weight and inertia of these parts and consequently reduces the wear on all the moving parts.

As on all Hall & Jansson folders, ball bearings are used at all wearing points where necessary. The machines are of steel construction throughout, except where good design calls for cast iron at a few points. The Hall & Jansson silk folder, available with air operated jaws, is guaranteed not to break the finish on the finest nylons or other synthetic fabrics, the firm claims. Further information may be obtained by writing the manufacturer.

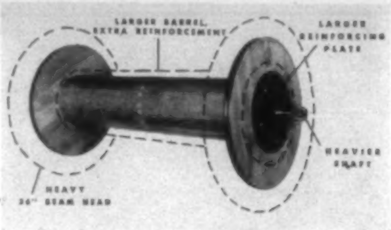
No. 10F Stud

In order to eliminate the rapid wear of both studs and slide hooks used on slide hook frames, Steel Heddle Mfg. Co. has produced a new swaged type stud known as the No. 10F. The new No. 10F stud has a smoother and more than doubled bearing area than the old No. 10D. Swaged, to avert the roughness caused by the slot being punched and case hardened, it has been found to not only increase the life of both stud and slide rod, but will outlive the No. 10D stud at least three to one.

Coatings Bulletin

A completely new four-page bulletin describing a dozen different special coatings for plant maintenance use has been issued by United Laboratories, Inc., of Cleveland, Ohio. This new literature describes the use of various industrial products for solving such problems as skidproofing, rust prevention, painting over damp areas, weatherproofing and decoration of exterior masonry, interior waterproofing, painting over hot surfaces, protection against acids, chemical fumes and other special maintenance work. The numerous problems are listed in the folder followed by brief suggestions as to the solution. The company advises that this new bulletin is available without charge upon request.

Allen Warper Beam



A new 35th anniversary line of large-package "double-capacity" high-speed warper beams is announced by Allen Beam Co., New Bedford, Mass. The new line is designated as Series M, and these beams in the large-package series now on sale are adapted for all kinds of fibers. This new Allen warper beam has 36-inch heads, giving it a yarn capacity of approximately 80 per cent more than previous beams.

Construction is heavier throughout, with larger barrels containing heavier cast iron reinforcement, heavier shaft with cast iron hub extending through head, heavier reinforcing rods and end plates. Heads are of the time-tested Allen construction in which sawn sections of kiln dried lumber are combined to achieve a balanced, resilient and distortion-free unit, with molded-on steel tire.

Advantages of the large-package beam, made possible by time-proven Allen principles, are: fewer beams to purchase and keep in stock; less maintenance of beams and heads; less handling in the mill and in shipping; longer runs without beam change-over. A descriptive booklet is available: "Series M Brochure," from Allen Beam Co., New Bedford, Mass.

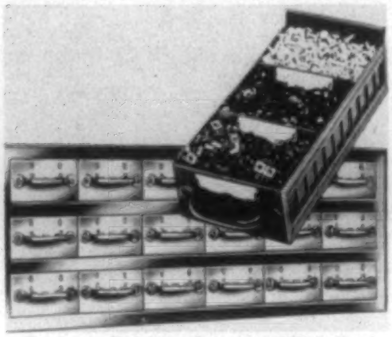
New Becco Bulletin

A new 26-page bound bulletin "Progress in Peroxides" compiled and written by H. O. Kauffmann and F. P. Greenspan of the Buffalo Electro-Chemical Co., Inc., research and development department, presents a composite picture of properties and applications of two important peroxygen chemicals, hydrogen peroxide and peracetic acid.

Oxidizing and reducing properties, bactericidal and fungicidal properties, free radical formation, high heat of decomposition and reaction, and gas formation on decomposition are characteristic for peroxygen chemicals and account for their usefulness in a variety of applications.

Bulletin No. 36 provides a broad coverage of these important applications of peroxygen chemicals with the help of many practical examples, tables and diagrams. The bulletin is available on request to the Buffalo Electro-Chemical Co., Inc., Station B, Buffalo 7, N. Y.

Equipto Cabinet



Equipto, division of Aurora (Ill.) Equipment Co., announces a new 18-inch deep 18-drawer steel cabinet as an addition to its established line of steel shelving, parts bins, work benches, stock carts, and various storage units. Wider, deeper drawers and larger more easily read label holders are the new features.

Drawer size of the new unit is 5½ inches wide by 3½ inches high by 17 inches deep, size ample to hold three-inch by five-inch cards as well as nuts, bolts, screws, electrical and hardware supplies, flower bulbs, laboratory supplies, etc. Drawers come equipped with two dividers adjustable on one-inch centers. Label holders are furnished on every drawer and divider.

The sturdy steel frames, as illustrated, stack on each other to accommodate a maximum of material in a minimum of space. Over-all size of cabinet 18 inches deep by 14 inches high and 34 inches wide. Finished in olive green baked on enamel.

Chelsea Catalog

Chelsea Fan & Blower Co. of Plainfield, N. J., has just issued a most complete catalog, price sheet and engineering bulletin describing 30 fan types in over 300 sizes. Included therein are complete specifications, dimensions, installation diagrams and product photographs, as well as extensive information on the proper selection and installation of fans for every industrial, commercial and residential requirement. This literature is available upon request from Chelsea Fan & Blower Co., Inc., Plainfield, N. J.

Durant Plant Expanded

Durant Mfg. Co., manufacturer of Productimeter counting and measuring machines, has announced the enlargement of its three-story plant on North Buffum Street, Milwaukee, Wis. A new addition completed in February of this year adds 16,000 square feet to provide space for new offices and plant production. Today, Productimeter counting and measuring machines comprise over 300 standard models for all types of industrial application, as well as special adaptations for the growing electronic field of manufacture.

A new warehouse and repair department have been established in Greenville, S. C., under the management of H. V. Barker, to facilitate deliveries and services in the Southern area. The Eastern division at Providence, R. I., under the management of L. A. Nourie, continues to servic the seaboard states.

Bristol Bulletins

The Bristol Co., Waterbury 20, Conn., has just published a bulletin describing the recently-announced Series 500 line of the company's open channel flow meters. The bulletin, No. F1606, describes the application of the instruments to the measurement of the flow of water, sewage, industrial plant effluent, irrigation water and other liquids through weirs and flumes of all types.

The company has also published a bulletin describing its line of Dynamaster electronic potentiometers and bridge instruments for industrial plant, pilot plant, process, research and laboratory use. The 36-page bulletin gives information concerning a number of new electronic instruments for recording and indicating such variables as temperature, pH, speed, voltage, power, current, smoke density, thickness, strain, and a wide variety of other variables which can be measured in terms of d-c current, d-c voltage, resistance, or capacitance.

In addition to single and multiple point recording models, pneumatic and electric-operated automatic control models are also described. The bulletin is liberally illustrated with photos of the basic electronic components of instruments and of the various models offered as well as reproductions of charts and wiring diagrams showing principle of operation. Photographs of several interesting new applications of these instruments are also included. The bulletin, No. P1245, is available from the Bristol Co., Waterbury 20, Conn., on request.

Hydro-Pruf Finish

Arkansas Co., Inc., of Newark, N. J., manufacturer of industrial chemicals, has released first details of a new durable water repellent finish that promises to be of great interest to textile manufacturers, retailers and consumers long plagued with problems of finishes failing too early in life of fabric.

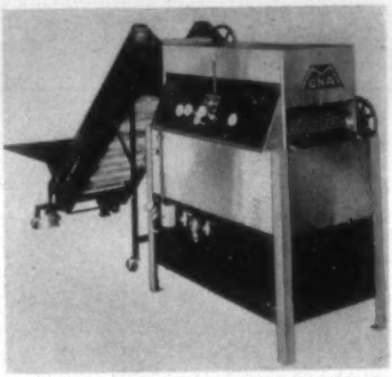
Named Hydro-Pruf, the new finish is a startling innovation, in that it represents a definite departure from established theories and processes and is entirely different chemically from other durable water repellents in the field. N. C. Shane, vice-president in charge of sales development and who developed Hydro-Pruf, describes it as being a non-foaming silicone resin.

Fabrics processed with Hydro-Pruf will stand many dry cleanings or go through many launderings with their resistance to spotting and water repellency only slightly impaired, it is claimed. With an initial spray rating of 100 by the A.A.T.C.C. spray test, a drop only to 90 is reported after as many as 20 dry cleanings of one acetate-viscose gabardine.

Hydro-Pruf is non-toxic, has no objectionable odor, comes in liquid form and is readily miscible in cold water in all proportions. It may be applied from a hot or cold solution as desired. A minimum temperature of 300° F. is required for curing in order to produce satisfactory results. Hydro-Pruf is compatible with urea formaldehyde and melamine formaldehyde resins and with many of the non-curing type resins.

Although "new" in respect to promotion, which is just about to begin, Hydro-Pruf actually has been in use for two years. The amazingly effective results secured in some of the country's leading mills necessitated continuous expansion of production facilities during this time to meet the demand.

Monalit-Duplex Conditioner



Mona Industries, Inc., Paterson, N. J., has just completed construction of a simplified, yet more versatile, cold water yarn conditioning and twistsetting machine suitable for yarn on bobbins and quills or for yarn on cones or other large packages. For conditioning of bobbins and quills the yarn is fed into the machine by a conventional hopper and feeding conveyor unit. For conditioning of cones and large packages the mobile feeding unit is rolled aside, so that the operator can feed the packages into the machine by hand.

The Monalit-Duplex conditioner is of stainless steel construction. All sides are enclosed and all controls can be operated from the outside. The machine has been designed for more efficient yarn conditioning, simpler control mechanism and easier handling and servicing.

The conventional wooden conditioning aprons, which permit only spraying the yarn from the top, have been replaced by modern stainless steel mesh conveyors, which permit perfect spray, both from the top and at the same time from the bottom, thus assuring perfect conditioning of the entire yarn package in one operation.

For easier servicing and cleaning the unit is of a three-section light weight construction. The mobile feeding unit can be rolled aside, whereas the entire top section of the conditioning machine, including the conditioning apron can be lifted off the lower tank and drive section for periodic cleaning of the tank and conditioning conveyor. The machines are constructed in various sizes to conform with the mills' individual production requirements.

Scher Bros. Expands

Increased laboratory facilities and equipment for more comprehensive research, development, testing and production of dyestuffs and textile finishes have been announced by Scher Bros., Clifton, N. J., manufacturer of Dy-Set dye fixative and a complete line of textile-chemical specialties. According to the announcement, the new facilities will enable Scher to offer the industry fullest co-operation on any immediate or long-range dyeing or finishing problem. Address all inquiries to Scher Bros., 519 Getty Avenue, Clifton, N. J.

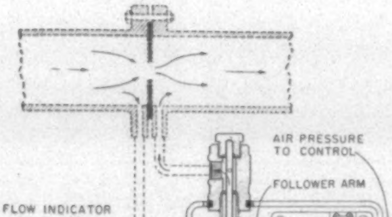
Spectrolene Garnet G

A new addition has been made to its line of Spectrolene dyestuffs for textile finishing plants, in response to the "enthusiastic" reception accorded its previous introductions, according to Nelson S. Knaggs, vice-president in charge of sales, The Hilton-Davis Chemical Co. Division. The new color is Spectrolene Garnet G. When coupled to various naphthols, it produces shades of bordeaux, garnet and red violet which retain good fastness to washing and light. Addition of Garnet G to its line brings to eight the number of Spectrolene colors made available by the company to the textile industry.

Spectrolene is a stabilized diazo compound developed by Hilton-Davis and introduced approximately ten months ago. In this new method for mixing dyes, the Spectrolenes and naphthols are put together at the textile finishing plants, thus giving a wide potential range of shades. Textile finishing plants have also found Spectrolene an advantage due to the fact the colors are made fresh, and thereby avoid deterioration and loss of brilliance and color, on standing. In addition, users have found them versatile and economic, Mr. Knaggs reports.

Other Spectrolene colors are Red KB, Red RC, Scarlet 2G, Orange HD, Blue B, Blue BB and Violet B. They come in 55-gallon drums.

New Fischer & Porter Unit



With a new product, known as the V/A cell, the Fischer & Porter Co., Hatboro, Pa., introduces to the industry a new approach to orifice metering. Instead of measuring the static-pressure differential across the orifice (as do conventional mercury manometers) the new Fischer & Porter unit meters a continuous by-pass stream around that orifice.

In the textile industry the characteristics of the new meter (kinetic action, linearity, rangeability, flexibility, and pneumatic transmission) mean: (1) the elimination of condensate pots in steam metering; (2) greater chart or dial accuracy at low flows; (3) wide range; (4) the adaptability of orifice metering to solvents and chemicals not amenable to static-pressure manometers; and (5) centralized control and totalizing remote from meter recording rims.

In operation, the cell is connected across the orifice plate in line with usual orifice-metering procedures. It can handle pressure differentials up to 1,400 inches of water column. The pressure differential causes a fraction of the flow to pass through the lead lines, range tube, and variable-area flow meter. The carefully-balanced float, riding freely in its tapered tube, is supported at a height determined by the flow. The float, completely free of mechanical linkage and attachments, carries two small Alnico magnets which couple it to the yoke of the follower arm without the need for pressure seals, bearings, or bellows. The pneumatic transmitter translates the position of the arm into air pressure and sends this signal, linear with flow, to a receiver instrument.

By changing range tubes at the high-pressure tap, the differential range of the V/A cell can be varied from 50 inches to 1,400 inches in standard increments with a useable flow ratio of ten to one at the 200-inch differential.

To satisfy wide metering requirements, the V/A cell is manufactured in two models: one with working pressure rating of 1,040 p.s.i. at 350° F. or 1,200 p.s.i. at 100° F.; the other rated at 2,600 p.s.i. at 350° F. or 3,000 p.s.i. at 100° F. All floats, float chambers and range tubes are inspected for performances and dimension.

The V/A cell (kinetic manometer and pneumatic transmitter unit) with direct-reading indicator scale, input and output gages, and mounting bracket sells for $252. It is also available with the Fischer & Porter Rotatronic electric transmitter and/or electric alarm switch. For further information write Fischer & Porter Co., Hatboro, Pa.

G. E. Booklet

A new booklet describing how the proper placement of water coolers can save payroll dollars by cutting wasted man-hours is now available from the General Electric Co.

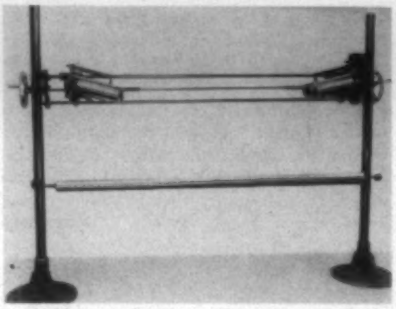
Entitled, *G-E Work Center Plan for Water Cooler Placement,* this booklet is based on an extensive study made by G. E. of the drinking water requirements of industrial plants and offices. It contains sample floor plans for proper placement of water coolers, a five-step method of analyzing the drinking water requirements of any work center, and an easy-to-use table for computing the payroll savings gained by using the G-E work center plan.

The booklet may be obtained by industrial and office executives without charge by writing to the General Electric Air Conditioning Division in Bloomfield, N. J.

Coloring Booklet

With the annual U. S. production of synthetic fibers approximating two and a half billion pounds, the 24-page booklet on *The Coloring Of Post-War Synthetic Fibers,*" a recent release by the technical service division, National Aniline Division of Allied Chemical & Dye Corp., is most timely. Described are the chemical and physical natures of the new acrylic and terephthalic acid fibers in relation to nylon. Dyeing techniques suitable for the various fibers are given in detail together with precautionary measures to be observed in processing these new products. Copies of this booklet may be obtained by writing to National Aniline Division at 40 Rector Street, New York 6, N. Y., or any of its branch offices.

Motor-Operated Guider Stands



Guider stands where the motor speeds the action of the carriages carrying the guider heads are being announced by the Guider, Roll and Service Co., Daytona Beach, Fla. The company is owned by Robert Hetherington, founder of Hetherington, Inc., Sharon Hill, Pa., maker of military aircraft switches and control devices. Newly designed manually-operated guider stands, where the operator widens or narrows the distance between the guider heads by a hand level, are also being announced by the company.

In some types of manually-operated stands the guider carriages are sped in their action by stepped-up pulleys. A motor-operated stand, however, is shown in the illustration. It is equipped with the latest type Hetherington mechanical guider. This concern also makes air and electrically operated guiders. Shown also in the illustration are dual hand wheels which make it possible to operate the same stands manually from either side. In the motor-operated stand switches on both sides control the movements of carriages and heads. When motor operated the carriages can be sped toward one another a distance of 40 inches in six seconds. Exact positioning is obtained by means of an electric brake coincidentally operated with the motor.

The company next plans to put stands on the market which narrow or widen the distance between the heads by a motor controlled by a photo-electric tube. This type will anticipate the cloth width before it reaches the guider heads. The first installation of this type is scheduled for June.

Two representatives have been appointed by the company. They are Joseph A. King, operating out of N. Attleboro, Mass., covering New England and Canada, and T. W. Kitchen, covering the South, with offices in Greenville, S. C.

Handling Firm Moves

Wrenn Bros. Co., material handling equipment firm of Charlotte, N. C., formerly located at 220 South College Street in Charlotte, has moved its office headquarters and warehouse to a modern building at Pineville

Road and Academy Street in Charlotte which it purchased recently for about $70,000. The company has branches in Richmond, Va., and Atlanta, Ga., and has exclusive franchises for Virginia, North Carolina, South Carolina, and Georgia for the Colson Corp. of Elyria, Ohio, and the Hyster Co. of Peoria, Ill.

Pyr-O-Vane Controller

A new instrument for close control of electrically heated or fuel-fired industrial process equipment has been developed by Minneapolis-Honeywell Regulator Co. The instrument, the Brown pulse Pyr-O-Vane controller, is a time-proportioning indicating millivoltmeter controller. Its use on such industrial equipment as small heat treating furnaces, plastic extruders, and nylon heat setting equipment will result in improved product quality and reduction of rejects. It is designed to provide straight-line control unobtainable with two-position or three-position controllers on these and other applications where rapid heating rates, small heating capacity or abnormal process lags are encountered.

The instrument has a variable proportional band between one and three per cent of full scale. A calibrated adjustment feature facilitates changing the setting. A set of change gears supplied with each instrument provides a choice of six cycle times to meet varied process requirements. A change in cycle time is easily made. Similar in appearance to the company's other Pyr-O-Vane and Protect-O-Vane controllers, the pulse Pyr-O-Vane controller has a universal case, for flush or surface mounting; a six-inch indicating scale, and plug-in galvanometer and control units.

Dexter Substantive Softeners

A basic group of four new substantive softeners said to answer the complete range of requirements essential to the textile finisher, has just been developed by the Dexter Chemical Corp. The new materials which are based on complex amine structures, are said to exhibit excellent resistance to washing and dry cleaning and will provide a highly desirable hand on fibers. Each softener, with the exception of cationic Ampitol ZR, has been developed to overcome a specific problem normally experienced with the use of cationic softeners.

Ampitol A, an anionic softener substantive to cotton, acetate, rayon and nylon, is recommended for use where maximum whiteness or resistance to light fading of the colors is important. In cotton processing, for example, substantive softeners have generally been avoided because of their yellowing effect upon cottons; this effect being greater on cotton than on rayon. Ampitol A gives cotton finishers an opportunity to use a substantive softener which does not yellow whites, or affect the lightfastness or shade of directs, naphthols and vats on cottons. Ampitol A is compatible with anionic agents, starch, dextrines, gums and similar substances, under normal processing conditions. The material is applied in the dye beck as a final finish, or it can be padded on to the goods.

Ampitol KZA, an unusual departure from all known softening agents and finishes, does not precipitate with anionic or cationic substances, and it can be used with acids, alkalis, resins and copper salts. KZA is completely substantive to cotton, acetate, visvose rayon and nylon, exhibiting its most efficient softening properties particularly on the synthetic fibers. All of these properties have made it possible for mills to use Ampitol KZA as an after-treatment of the processed goods without need for rinsing the goods free of anionic agents. Elimination of time consuming extra rinses permits the finisher to run more lots per tub, at greater speeds and without sacrifice of quality. Furthermore, Ampitol KZA can be applied directly in many dyeing operations and with many resins, salts and other substances which would cause trouble with conventional softening agents. This achievement is primarily the result of adding certain solubilizing groups to the softener molecule, while at the same time retaining certain groupings in the molecule which are responsible for its affinity for cotton, acetate, rayon and nylon.

The problems of non-yellowing, lightfastness and compatibility with anionics are taken care of by the separate new softeners described thus far. What of the situation where all of these properties are required by a textile finisher? For such eventualities, Dexter has developed Ampitol KZ3H, a substantive softener which does not affect the lightfastness of colors, does not yellow whites and is compatible with anionic and cationic agents under normal processing conditions. KZ3H is also substantive to cotton, acetate, rayon and nylon, and its application is equally as flexible as that of KZA. Although KZ3H imparts a high degree of softness on fibers, its softening is slightly less than that of the other Ampitols because some compromise was necessary in achieving a versatile combination of properties for the product.

Oldest in order of development in the Dexter Laboratories is Ampitol ZR, the fourth member in the new basic substantive softener group. Ampitol ZR is a straight cationic softener, said to produce an exceptional degree of softness at low cost.

A softener selector bulletin, describing the four new items, is available on request to Dexter Chemical Corp., Box 1, Blvd. Station, New York 59, N. Y.

New Fugitive Tints

A. L. Brassell, president, recently disclosed United States Testing Co., Inc., has brought to a successful conclusion four years of effort devoted to the development of a new line of all-purpose fugitive tints. Mr. Brassell stated: "The need for a tint fugitive on wool after steam setting has existed for years in the textile industry. We have considered this a major responsibility in our company and our researchers have been working on the problem constantly.

"We have now developed tints which will be distributed under the trade-name Blentex. This new line of tints was developed particularly for wool, but has the outstanding advantage of being suitable for blends of fibers such as nylon, Dacron, acrilan, dynel, vinyon, Orlon 81, viscose, acetate and cotton. With the increase in the number of synthetic fibers and the use of blends of natural and synthetic fibers, Blentex fills a much needed requirement."

Blentex tints are liquid dye concentrates readily soluble in water and can be applied as a spray on the loose stock in the opener, daubed on cones or quills, or applied to the sliver or roving, or by any other means now employed. Sold in concentrated form, it should be diluted with water when sprayed on stock or daubed on cones or quills. Proportions of 1½ parts of Blentex to 98½ parts of water will produce a suitable tint solution for proper identification.

When it is applied in the concentrated form to sliver or roving by means of a marking wheel or similar application, the marks should be spaced so that application is proportionate to about one per cent of the weight of the stock. When spotted on the sliver or roving, it gradually spreads itself throughout the stock during subsequent processing so that the final yarn shows an over-all tinting.

Blentex tints are readily fugitive in the usual mill scouring treatment, and they are fugitive even after the tinted yarns have been subjected to steam setting treatments prior to the scouring operation. The tints come in five colors: red, yellow, blue, orange, and purple and are available in one gallon cans, five gallon pails and 50 gallon drums. Samples or detailed information regarding your particular requirements may be obtained from United States Testing Co., Inc., Tint Division, Hoboken, N. J.

Taylor Dial Indicator

A newly designed dial indicator which is suited for modern instrument panels and equally desirable for individual mounting has just been released by the Taylor Instrument Companies. This new instrument was primarily developed to meet the requirements of the many temperature, pressure and load applications in industrial processing.

The Taylor six-inch dial indicator has a high-visibility dial with white graduations and numerals on a black background. Its white wedge shaped pointer or indicator is provided with a microadjustment to permit easy and accurate zero settings. A notable feature is the new stainless steel movement which is dsigned to eliminate linkage errors.

The case of die-cast aluminum is so constructed that it may be easily face or flush mounted, bottom or back connected. The bezel and case are cast with breech lock threads which are quick acting and require less than one-quarter of an inch turn to fully engage or separate. This ideal locking device holds the glass tightly against the recessed rubber O-ring to provide an effective seal against moisture and fumes.

The design of the instrument provides for almost universal actuation by any variable that makes use of a Bourdon spring as an energy-to-motion converter. For temperature applications, four different types of actuation are available: mercury, vapor, gas or organic liquid (Monolex). Ranges from minus 100 to plus 1,200° F. For pressure applications, range spans from 12 to 20,000 p.s.i. are available. Tension and compression load elements can also be incorporated in the new instrument for load applications with ranges from 0 to 75,000 pounds. For additional information, write for Bulletin 98214, Taylor Instrument Companies, Rochester 1, N. Y.

Ucon Lubricants

After years of research and development work at Lowell (Mass.) Textile Institute and extensive testing in actual mill runs, Carbide & Carbon Chemicals Co., a division of Union Carbide & Carbon Corp., recently announced a series of synthetic water-soluble wool oils that have outstanding properties for use on both the woolen and worsted systems.

Ucon brand textile lubricants are completely soluble in water. They differ in performance and in chemical nature from animal, vegetable, and mineral oils. For the woolen system, the construction usually required is only two per cent of the weight of the wool—a 50 to 80 per cent reduction below the amount of conventional oils needed. On comparative mill runs, card strippings were reduced 18 per cent; ends down in spinning were reduced as much as 90 per cent. In worsted processing, Ucon lubricants lessen fiber breakage and provide excellent spinning qualities.

To prepare for use, Ucon lubricants are merely stirred into water without heating. No borax, soap, ammonia, lard oil, oleic acid, surface-active chemicals or emulsifying agents are necessary to solubilize them. Uneven results in dyeing and finishing due to residual lubricant are eliminated since the lubricants are completely removed from fibers with minimum scouring.

Ucon lubricants do not thicken, become rancid, or develop hard-to-remove oxidation products. They are non-staining to wool fibers, non-corrosive to textile equipment, and do not attack rubber or leather, the company claims.

Hydraulic Drum Up-Ender

An economical hydraulic drum up-ender attachment which permits fork truck operators to pick up, transport, stack and empty heavy drums without leaving their seat, has been developed by Baker-Raulang. Drums can be rotated 90 degrees for vertical or horizontal stacking, or tilted 45 degrees below horizontal for emptying at any height within the lift range of the truck.

The up-ender adds a rotating "fifth purpose" to Baker's famous four-purpose carriage which already provides standard forks, fork-spacer, an automatic adjusting clamp and side-shifter in one unit. De-mounting the unit is simple—remove two lock pins, unsnap one quick-detachable hydraulic hose coupling, and slide the up-ender off the forks.

The attachment consists of shoes which are "pinned" to the forks of the Baker four-purpose carriage. Mounted on the shoes are pivoted rubber-faced grab plates which clamp around the drum and hold it firm. The up-ending operation is accomplished through a hydraulic cylinder mounted on one of the shoes. Operation of the hydraulic cylinder builds up pressure in an actuating accumulator mounted above it, which is used to return the drum to an upright position.

In addition to the quick-demounting feature, an important advantage is that the operator maintains complete control from his seat. Clamp and tilt controls are dash-mounted at his left for convenience. Both the four-purpose carriage and the hydraulic up-ender can be mounted on 2,000, 3,000 and 4,000-pound Baker fork trucks.

Westinghouse Booklet

"Undivided responsibility" for application of both motors and their controls to the textile industry is the theme of a new 32-page booklet available from the Westinghouse Electric Corp.

Problems common to the textile industry are discussed—such as lint clogging, shock and vibration, corrosion, and speed and tension control—and it is shown how solutions can be obtained through correct use and selection of both motors and controls. In addition, eight case histories provide, in the user's words, an actual sampling of the benefits to be gained by co-ordinated application.

Both internal and external construction details of available motors and controls for various textile industry applications are described and are illustrated by means of cutaways, sketches and photographs. Co-ordinated engineering, manufacturing, application, repair, etc. facilities available to the user are given in a special section. Reply cards are provided to speed handling of requests for any of 35 special applicable booklets listed.

For a copy of this booklet, B-5422, write Westinghouse Electric Corp., Box 2099, Pittsburgh 30, Pa.

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Yarn Groups Schedule Cruise Convention

The Southern Combed Yarn Spinners Association recently decided to hold its annual convention on a joint cruise to Bermuda with the Carded Yarn Association, Inc. According to George W. Boys of Green River Mills, Tuxedo, N. C., president of the combed yarn group, a poll of the association's membership indicated 92 per cent were interested in taking the trip.

Separate business sessions of the two spinner groups will be held aboard the S.S. Queen of Bermuda en route to the British resort, with probably one joint gathering. The ship will leave New York Oct. 24 and the following day will sail from Norfolk, Va. On the return voyage, it will reach Norfolk Oct. 30 and New York the next day.

Arrangements and reservations are being handled through the U. S. Travel Agency, Washington, which will mail reservation forms to members.

Guest Brochure Illustrates Many Projects

C. M. Guest & Sons, construction firm of Anderson, S. C., and Greensboro, N. C., recently issued an attractive, hardbound brochure containing numerous illustrations of industrial construction work accomplished by the firm. The illustrations, for the most part, show textile plants of various types constructed in the South by Guest.

A foreword to the brochure tells of the founding of the firm in 1893 by Clingman M. Guest. It states: "From ability demonstrated in the building of fine homes, Clingman Guest was selected to help supervise the construction of cotton mills promoted by Southern interests and financed in part by Northern machinery manufacturers.

"Building in those days lacked the precise planning, organization and facilities of our modern economy. It was tough going under the best of conditions. On his early projects, Guest had to go into the forest and cut his own lumber. He had to produce his own bricks from nearby clay pits. Mules did the hauling. Skilled workmen were scarce. Most of the workers were part-time farm hands. In spite of handicaps crowding in from all sides, Guest completed the jobs on time and turned over to the owners soundly constructed mills.

"So began an experience which, under two generations of the Guest family, has attained a scope and ethical stature best measured by the number and variety of construction projects faithfully executed by this 58-year-old concern."

Uniform Ceiling Price For Branded Items

The Office of Price Stabilization March 26 revised methods and standards for approval of uniform dollars-and-cents retail ceiling prices requested by manufacturers or wholesalers of brand-name articles of apparel and home furnishings. Evidence that a manufacturer or wholesaler historically suggested uniform resellers' prices, and that retailers sold at these prices, is required by O.P.S. Examples of substantiating data are copies of published price lists and national advertising and certifications from a representative group of retailers of brand-name articles.

The action (Supplementary Regulation 4 to Ceiling Price Regulation 7, and Amendment 16 to C.P.R. 7, both effective March 26, 1952) does not increase or decrease ceiling prices to the consumer, O.P.S. said. Brand names may be owned by manufacturers or wholesalers, the agency explained. Those whose requests for uniform retail prices are approved are generally required to mark or tag their brand-name articles with a distinctive tag or label to show that their O.P.S. ceiling prices are established by this uniform pricing method. Thus the action continues to make it possible for consumers to know that they are not paying more than O.P.S. ceiling prices for brand-name articles, the agency added. The action does not prevent retailers from selling below ceiling, O.P.S. pointed out.

Last month's supplementary regulation replaces Section 43 of C.P.R. 7 under which more than 750 firms have applied for and received approval of uniform ceiling prices. Their individual orders will be revoked automatically on the date ceiling prices for each firm are authorized under this supplementary regulation or June 30, 1952, whichever date is earlier. On and after April 1, 1952, holders of these orders may apply for authorization of uniform ceiling prices under the new standards.

Use of the new specific standards will make it possible for an applicant to determine with his own figures whether or not his proposed ceilings and mark-ups are in line. He will also know, before submitting his application to O.P.S., exactly what data will be required to make him eligible for uniform resellers' ceiling prices. The lack of these specific standards, and the resultant administrative difficulties from the standpoint of O.P.S., was a major disadvantage of Section 43 of C.P.R. 7 as a means of obtaining uniform resellers' selling prices, O.P.S. explained.

Under the new supplementary regulation, the procedure for establishment of uniform resellers' ceiling prices is almost automatic in the sense that proposed ceiling prices may be considered approved by O.P.S. 30 days after application or filing of additional data requested by the agency, unless notification is given to the contrary.

Generally, the new standards require a listing of all branded articles in each category sold at uniform prices during the base period and a listing of the corresponding mark-ups and selling prices for the articles. The base period is the calendar year 1950. This information must be filed with O.P.S. together with the proposed ceilings and mark-ups for every article uniformly priced. The proposed mark-up on any article in a category must be the same as the mark-up on the article during the base period. In obtaining authorization of uniform resellers' ceiling prices under this supplementary regulation, every manufacturer or distributor of branded articles is made responsible for getting notices of the ceilings in the hands of all persons to whom he delivers.

Rayon Called King Of Man-Made Fibers

Four of the nation's leading textile scientists were speakers at the two-day meeting of the American Chemical Society March 26-27 at Buffalo, N. Y. Addressing the society's division of industrial and engineering chemistry were Julius B. Goldberg, director of research, J. P. Stevens & Co.; Carl O. Hoyer, director of engineering, Chemstrand Corp.; Dr. Winfield W. Heckert, assistant general manager of the textile fibers department, E. I. du Pont de Nemours & Co.; and Dr. Joseph B. Quig, manager of the textile research division of the Du Pont textile fibers department.

"Viscose rayon is still the king of man-made fibers, and it will take more than a mild revolution led by the new fibers to depose this ruler, or cause any severe loss of the empire built up during the past 40 years," Mr. Goldberg stated. "The newer man-made fibers are providing us with fabrics which are indeed unusually serviceable, stable, crease-resistant, easy to care for, and luxurious to the hand," Mr. Goldberg told a symposium of the society's chemical marketing subdivision on 'The Status of Newer Synthetic Fibers.'

"We appreciate their virtues and bow to their charms, but for the present and immediate future they may be regarded as the pastries of our dinner table. We are happy to sweeten our diet, but they are not likely to supplant our daily bread—viscose rayon," Mr. Goldberg said.

Effect of the atomic age is an increasingly important factor, along with all known economic considerations in selecting sites for modern industrial plants, Mr. Hoyer asserted. Addressing society members on the subject, "Factors Influencing Choice of Plant Sites," Mr. Hoyer stated that "for the first time in U. S. history, the need of maintaining industrial production under prolonged conditions of possible direct military action must be faced.

"In recognition of the fact that there is no known defense against the atomic bomb itself, except for the space about us, dispersion is one of the first considerations necessary for strategic safety of industrial facilities," Mr. Hoyer said. "The trend generally is to get away from areas where labor and plant facilities are now concentrated, and to locate in areas not so heavily developed industrially."

Mr. Hoyer acknowledged that this factor, plus primary geographic and economic considerations, had a bearing in Chemstrand's selection of Decatur, Ala., and Pensacola, Fla., to locate respectively its Acrilan and nylon textile fiber plants now under construction. At Decatur, the company also is building its administrative headquarters and research and development center, adjacent to the Acrilan acrylic fiber manufacturing facilities.

The vast array of new textiles made possible by the rapid appearance of additional synthetic fibers creates a need for a whole new science to find the best uses for each fiber, Dr. Heckert declared.

This new science would relate the functional performance of garments and textiles to their structure, the conditions of service, and the properties of the fibers from which they are made, Dr. Heckert explained. Dr. Heckert discussed "The Selection of Fiber Monomers" in the opening paper of a two-day symposium on the "Status of the Newer Synthetic Fibers."

Pointing out that as more and more new fibers are developed, the study of market acceptance becomes all the more important, Dr. Heckert said: "This is a field in which there are innumerable variables, and only a small beginning has been made in attempting to unravel some of the more important relationships."

Production of truly synthetic textile fibers in the United States will total approximately 400 million pounds annually by 1953, it was forecast by Dr. Quig, who said that the present status of the synthetic fiber industry is a "far cry"

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from that which existed when the American Chemical Society met in 1931.

It was during the society's meeting in Buffalo on Sept. 1, 1931, Dr. Quig pointed out, "that a timid finger of light marked the dawn of a new era in the textile industry." His reference was to a report presented by the late Dr. Wallace H. Carothers and Dr. Julian W. Hill, Du Pont chemists, on the first polyester fiber ever made. This was the forerunner of the present "Dacron" polyester fiber and the polyamide fiber, nylon.

Citing an account of that 1931 report, Dr. Quig noted the statement that "the Carothers-Hill fiber is as lustrous as real silk, stronger and more elastic than rayon, as strong and elastic as real silk." But, continued the account, "it is too expensive to manufacture commercially, is mainly a demonstration of chemical knowledge and skill."

Dr. Quig outlined the common advantages demonstrated by the new fibers as equivalent wet and dry strength, retention of pressing creases and pleats, dimensional stability to laundering, dry cleaning and change in relative humidity, retention of shape of garments, ability to be heat-stabilized, easy launderability, quick drying, resistance to degradation by chlorine bleaches, resistance to micro-organisms and insects, high strength and durability, and high resistance to stretch.

"With these new fibers on the shelf of the laboratory," said Dr. Quig, "the textile technologist will have greater latitude that will permit him to engineer, scientifically, fabrics which will give the maximum performance under all conditions of service."

Slump In Per-Capita Fiber Consumption

Per capita consumption of all fibers in the United States in 1951 dropped three-quarters of a pound from 1950, but per capita consumption of cotton and synthetic fibers (other than rayon) continued to rise, according to figures released April 3 by the Bureau of Agricultural Economics, Department of Agriculture. The use of wool, expressed as a percentage of the total use of all fibers, dropped to at least the lowest point in the past 38 years.

Total per capita consumption of all fibers was 44.04 pounds compared to 44.8 pounds in 1950. Per capita consumption of cotton rose from 30.69 pounds in 1950 to 31.26 pounds in 1951, a gain of 0.53 pounds per person and the highest per capita use since 1947.

Total consumption of cotton, however, which amounted to 71 per cent of the total consumption of fibers, hit 4,851,374 pounds, the highest consumption in this country except for the boom war years of 1941 through 1943. The figures include use of fibers by the military as well as civilians.

Last year also showed a reverse of the trend of cotton taking an increasingly smaller portion of the total fibers used in this country. Since 1913 (the starting year of the B.A.E. figures), when cotton took 90.3 per cent of the total, the figure has been dropping steadily. In 1950 it was 68.5 per cent.

Per capita use of wool dropped sharply from 4.16 pounds in 1950 to 3.09 pounds last year, a reduction of nearly 25 per cent. Wool comprised but seven per cent of the total use of all fibers, the lowest percentage. It was listed at 2.3 pounds below last year's figure and even below the depression year, 1934, when wool took 7.3 per cent of the total use.

Per capita use of rayon dropped from 8.86 pounds in

1950 to 8.22 pounds last year and from 19.7 per cent of the total to 18.6 per cent of the total last year.

However, the use of rayons per capita, as a percentage of total fiber use and the total poundage of rayon used were higher than that of any year except 1950. The drop from 1950 to 1951 was a reversal of the steady trend of increasing per capita use of rayon and the steady increase of the percentage use of this fiber.

Other synthetics continued their strong climb. From .95 pounds per capita to 1.35 pounds per capita in 1951 and from 2.1 per cent of the total in 1950 to 3.1 per cent in 1951. Use of silk dropped from .07 pounds per capita to .05 pounds. Its percentage of the total was cut in half, from 0.2 per cent to 0.1 per cent. The per capita use of flax remained steady at .07 pounds.

Quality Control Men Meet In Atlanta

Application of quality control methods to the textile industry were discussed by authorities on the subject at the Spring meeting of the Textile Quality Control Association held April 3-4 at Atlanta, Ga.

A feature of the meeting was an exhibit of the latest textile testing equipment with engineers on hand to demonstrate each piece of equipment. Some of the testing devices were viewed for the first time at the Atlanta meeting.

A basic method of establishing statistical controls for ranges of yarn counts, roving weights and sliver weights through Pacific evenness tests was disclosed by Norman H. Chandler, research physicist, Thor Mills, Granby, Que.

The Pacific evenness tester, he explained, is one of various evenness testers to appear in the textile trade that are capable of continuously amplifying the variations of yarn or sliver cross-sectional area about an average value and permanently recording the amplified fluctuations on a length of chart paper. Calculations made on the tester chart yield a numerical value proportional to the actual unevenness of the yarn or sliver under test, Mr. Chandler explained.

Test results from three different laboratories indicate that the Uster tester, in calculating unevenness, is affected to a small extent by the presence of moisture in the material being measured, Dame S. Hamby, chairman of the School of Textiles at North Carolina State College, told the association.

However, it has been found that within the normal operating ranges of from five to eight per cent moisture regains for cotton yarns, the effect can be disregarded, since the change in yarn evenness due to moisture within these limits is so small that it is negligible, Mr. Hamby said in his report of Task Group E-202 T.Q.C.A.

In his talk on "Effect of Moisture on Capacitance-Type Evenness Tester," Mr. Hamby explained the Uster and I.T.T. method of calculating per cent unevenness and gave the results of different methods for calculating per cent unevenness.

Some of the most important factors which are likely to affect results of unevenness measurements he listed as: (1) Moisture—can be disregarded if the moisture is homogeneously distributed in material and is between the limits of five to eight per cent. (2) Zeroing machine at start of test. (3) Method used to calculate per cent unevenness. (4) Form or shape of material as fed to machine.

Tests for resistance to abrasion of textiles now being conducted are bringing conclusions and results that are of

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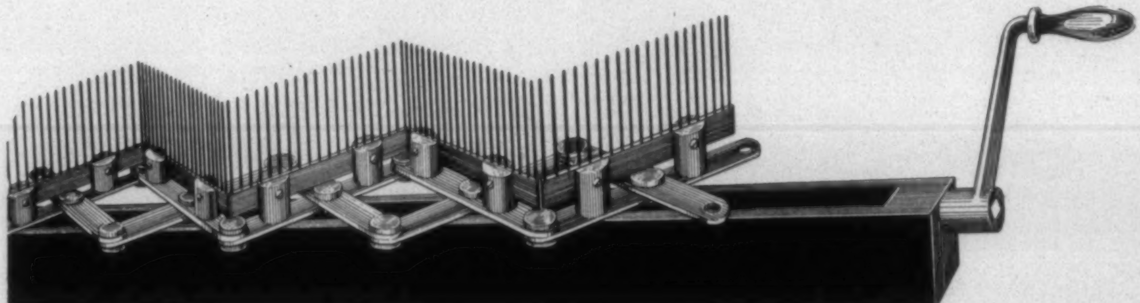

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utmost significance and importance, giving new hope concerning the value and importance of abrasion testing, Dr. H. F. Schiefer, director of research, School of Textiles, North Carolina State College, told the textile control group.

Sixteen fabrics had been selected for the tests from a group supplied by the Philadelphia Quartermaster Depot, Dr. Schiefer said. These fabrics varied systematically in warp and filling yarn number and in ends and picks. The resistance to abrasion of these fabrics was determined with the Schiefer abrasion testing machine using No. 600A silicon-carbide waterproof abrasive paper as the abradant and a total load of two pounds on the specimen in one testing procedure, and a blade abradant and a total load of 20 pounds on the specimen in a second testing procedure.

The rate of abrasion in the first testing procedure was ten times as great as that in the second, he reported.

It was found, Dr. Schiefer told the group, that the rankings of the 16 fabrics were different for the two testing procedures, mainly due to the fact that a given change in one construction factor does not always result in quantitatively comparable changes in the resistance to abrasion obtained by the two procedures.

Scraping the outside of cotton bales and use of a drycleaning method introduced by the Institute of Textile Technology research group under Dr. Jack Compton is bringing good results in the removal of tar spots from cotton cloth. This report was given by R. Hobart Souther, Cone Mills Corp., Greensboro, N. C.

As a result of this scraping process, the number of tar spots occurring in the bleached goods was reduced from about 6.5 per yard to about 2.5 per yard, thus making less work for the spotters or dry cleaners, he declared. By spotting the bleached goods, all the tar spots can be removed in the subsequent dyeing process.

Reviewing the tar spot problem that has plagued cotton mills since the late 1930s, Mr. Souther recalled that earlier tests had revealed that tar was contaminating the bales from coated ties. When the painting of ties was discontinued, tar spots were almost eliminated until recently when they began to appear in alarming numbers again.

"The test method we now use for cotton in the bales is as follows: Saturate a white paper towel with tetrachlorethane. Press saturated paper towel against side of bale or against top or bottom. When testing inside of bale, place saturated paper towel between layers of cotton and press layers together. Make six tests on the outside of bale (top, bottom and all four sides) and six tests on inside. Confirmation of the spot being tar is made by inspection under ultra-violet light which gives a characteristic halo to a tar spot, exhibited by no other compound thus far observed." This method may be adapted for cloth or cotton in any stage of processing, Mr. Souther told the textile quality control group.

High-speed testing of yarn qualities is definitely an improvement over slow, conventional speed testing, and results of high-speed tests on synthetic yarns in the textile research department of the American Viscose Corp. have proved "satisfactory," Arthur E. West, textile engineer of the firm's staple division, Marcus Hook, Pa., told the association.

All tests were done on rayon and synthetic blends and no results are known on cotton, Mr. West emphasized. These high-speed tests were started by American Viscose in seeking a method of grading very small differences in yarn qualities simply and quickly.

"We were concerned with the difference between a yarn graded A for neps and A for evenness and a yarn graded A minus for neps and A for evenness. Tests run at conventional material speeds resulted in much overlapping which made it impossible to set up standards for small quality differences. From a study of these charts and results we found that we were apparently recording tension changes, due to ring rail movement, the roving traverse and the relationship of these. These changes, whatever the cause, were causing continual movement of the integrator meter, which made accurate reading almost impossible." A series of tests were made using material speeds ranging from 25 to 150 yards a minute, Mr. West said.

"From all our tests we have found that the results are accurate within a range of 90 to 110 yards per minute. We also showed in this test that the integration values from 50 to 100 yards per minute were essentially comparable. Therefore the 100-yard-per-minute material speed was picked because first we were testing more yarn and secondly because the integrator needle had considerably less movement at this speed. We found in most of our tests that after one minute running time, the integrator value does not change over one per cent and the average value over one-half to one division, depending on the evenness of the yarn being tested."

J. L. Delany, superintendent of Joanna (S. C.) Cotton Mills Co., in discussing "Application of Fiber Fineness to Quality Control," presented the following conclusions:

(1) Fineness of cotton fiber strongly influences the spinning operation and the quality of yarn spun.

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(2) Buying cotton from one locality or of a single variety will not guarantee fineness uniformity.

(3) By measuring the average fineness of each bale and by proper blending on standard mill machinery, one can be sure that the cotton fed into the mill has the same average fineness from day to day.

(4) With the fineness of the fibers under strict control it is possible to maintain close variations in card nep counts as well as in the cloth. Spinning room ups and downs are minimized and spinning production can be held near maximum with only a nominal reserve for performance variations.

(5) Since fineness is under control, continuous operation of mill machinery under most favorable settings is possible.

(6) The cost of determining fiber fineness runs at about seven cents per bale. This is practically painless and we may well paraphrase Winston Churchill in saying that "never has so little saved so much."

The association set Oct. 3 as the tentative date for its next meeting, to be held in Raleigh, N. C. The association is composed of quality control men and textile scientists from Georgia, Virginia and the Carolinas.

Ga., S. C. Cotton Buyers Hold Parley

The cotton buying divisions of the Cotton Manufacturers Association of Georgia and the South Carolina Textile Manufacturers Association met jointly last month in Atlanta, Ga. Hewlett Bagwell of Pacolet Mfg. Co., New Holland, Ga., was elected chairman of the Georgia group's cotton buyers division and J. D. French of Kendall Mills, Newberry, S. C., was named to head the South Carolina group's division. Elected vice-chairmen were James Hammond of Riegel Textile Corp., Trion, Ga., for the Georgia group, and J. C. Bell of Inman (S. C.) Mills for the South Carolina group.

Mr. Bagwell succeeds Ben Keyser of the Graniteville Co., Augusta, Ga., and Mr. French succeeds Ben Whitney of Pacific Mills, Lyman, S. C. Approximately 350 cotton buyers from the two states attended the joint meeting.

Piedmont A.A.T.C.C. Unit Meets April 26

The handsome new Clemson House at Clemson, S. C., will be the scene April 26 for the Spring meeting of the Piedmont Section, American Association of Textile Chemists & Colorists.

The program will get underway at 10 a. m. with a meeting of the research committee in the textile building of

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Clemson College. This meeting will be open to all members interested in their own problems or the problems of others. An officers luncheon will follow at 1 p. m.

The technical session, also to be held in the Clemson textile building, will open at 3 p. m. Principal speaker at this session will be D. D. Gagliardi of Warwick Chemical Co., whose subject will be "New Chemical Finishing of Textiles."

The technical session will be followed by the student contest between students from Clemson College, N. C. State College and Georgia Tech. R. H. Smith of High Point (N. C.) Chemical Mfg. Co., chairman of the student contest committee, will preside.

The event will be concluded with a banquet at 7 p. m. at the Clemson House. George McElroy, manager of the new Owens-Corning fiberglas plant at Anderson, S. C., will be guest speaker at the banquet. John S. Beattie of Abbeville (S. C.) Mills Corp., is in charge of arrangements for the meeting.

Atomic Energy To Power Textile Plants?

Possibility that atomic energy may eventually be used as the source of power for cotton mills and other textile plants was raised April 8 by a textile industry executive and former Massachusetts educator in an address at North Carolina State College, Raleigh.

The message came from Kenneth R. Fox of Greensboro, N. C., vice-president and technical director of Burlington Mills Corp., whose speech was a feature of the "B. B. Gossett Textile Lecture Series" in the School of Textiles at N. C. State College. Mr. Fox, who spoke on the subject, "Textiles Unlimited," was introduced by Dean Malcolm E. Campbell of the college's School of Textiles, who arranged the program and presided.

The Greensboro textile official, who became the nation's youngest college president when he was elected head of the Lowell (Mass.) Textile Institute in 1945, said he regarded the use of atomic power to propel textile mills as "a probability" instead of a possibility. The speaker reported that President James B. Conant of Harvard University has expressed the conviction that solar power may ultimately be utilized in industrial operations.

Explaining the evolution of the textile industry, Mr. Fox said textile plants have depended on horsepower, water power, and electric power and are now looking to the field of nuclear energy as a new source of power.

He also hinted that new designs for textile mills may be a future prospect, saying that machinery now in use may be regarded as obsolete with the invention of new devices, the manufacture of new products, and the use of new fibers in production.

Mr. Fox, a former professor at the Massachusetts Institute of Technology, reviewed the current developments in the industry and told of the new methods of accounting, processing, merchandising, fiber development, textile machinery, textile testing, and industrial relations.

Utilization of X-ray methods and radioactive tracers in textile research, he said, gives promise of providing even greater advances and of bringing a higher level of prosperity to the textile industry. Opportunities open to young men and women in the textile industry, he declared, are "most stimulating, most challenging, and unlimited" as a result of new achievements in science and technology. The field of synthetic fibers alone, he said, has opened up a number of possibilities for employment and for research work. There are between ten and 15 different fibers now in use in the industry, he explained.

Mr. Fox praised Dean Campbell and the School of Textiles at North Carolina State College for doing "an excellent job" in textile education and research and indicated that the school is a key factor in building a stronger textile industry in this region. The Burlington Mills executive said the textile industry in this area "respects and is grateful" for the programs of technical training and research now underway at the State College School of Textiles.

Rio Student Wins Euvaldo Lodi Scholarship

Selection of Claudio Vieira de Carvalho of Rio de Janeiro, Brazil, as the first recipient of the Euvaldo Lodi Scholarship in the School of Textiles at North Carolina State College was announced recently by Dean Malcolm E. Campbell. Claudio, who will receive $1,750 annually for two years, was named as the the winner of the scholarship award following his selection as the top student in the Technical School of the Chemical and Textile Industries in Rio de Janeiro.

He has already arrived at North Carolina State College and has begun his academic work for a B.S. degree in textiles. Upon the completion of his studies at the college, he will return to Brazil and will teach in the Technical School, of which he is a graduate.

Funds for the establishment of the scholarship at North Carolina State College were contributed by four United States builders of textile machinery. They are Saco-Lowell

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Under the scholarship plan, another Brazilian student will be awarded a two-year scholarship in the School of Textiles at North Carolina State College next year. Thereafter, there will be two students from Brazil enrolled under the new program in continuous residence at North Carolina State College.

British Textile Leader Visits I.T.T.

J. T. Marsh, British textile authority, inspected research facilities at the Institute of Textile Technology, Charlottesville, Va., during a three-day visit, and revealed that British research problems appeared to be similar to those in America. "Manpower is short in British research centers," Mr. Marsh said, "and this appears to be an American problem, too, though you at I.T.T. obviously have made substantial progress in your seven years of experience."

Mr. Marsh's position in British textiles is that of research manager of Tootal Broadhurst Lee, prominent textile manufacturers and leaders in the field of fabric creaseproofing.

When questioned as to the type of research program preferred by British organizations, Mr. Marsh replied that a balance between fundamental and applied research was the ideal program. "A consistent program in fundamental research leads to the production of practical applications in industry. New inventions may be called bonuses produced by persistent fundamental investigations."

The British research leader is also author of several books on textile chemistry and a fellow of the Textile Institute of Britain. Mr. Marsh was the guest of Dr. Jack Compton, I.T.T. technical director, during his visit which was highlighted by Mr. Marsh's lecture on methods of creaseproofing fabrics.

Seminar Reviews Wool Research Project

More than 100 research leaders, textile mill officials and government representatives were in attendance April 7-9 at Lowell (Mass.) Textile Institute for a seminar, sponsored by the Wool Bureau, to review important findings of the first three years of the international wool research project and to discuss the application of these findings to everyday mill operations.

Most of the textile scientists in attendance agreed that, although no earth-shattering developments are presently being unveiled for the public and industry, yet definite results will come out of their probings into the basic properties of wool.

In an address opening the seminar, F. Eugene Ackerman, president of the Wool Bureau, labeled the mournful cries of those who described the wool textile industry as stodgy and unprogressive as "simply eyewash."

"There is a tendency these days among many who make public appearances before trade bodies connected with the textile industries to prophesy doom for wool as mankind's dominant and most necessary fiber," Mr. Ackerman asserted. "These prophecies have two aspects. One magnifies the threats and the properties of man-made fibers. The other

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decries the 'dull and unprogressive' status of the wool textile industry."

Mr. Ackerman pointed out that consumption of wool within the last decade has increased from an average of 625 million grease pounds annually to an approximate one billion grease pounds annually. During the post-war period, he declared, consumption of wool in the United States has been 73 per cent higher than in the pre-war period—as against a world increase of nine per cent.

Flammability Standard Up For Acceptance

A recommended commercial standard for flammability of clothing textiles is now being circulated among representatives of the textile industry, the Commodity Standards Division of the U. S. Department of Commerce announced April 10. Several years ago a number of fatalities resulted from the extremely flammable character of certain articles of clothing, particularly long-napped rayon chaps of children's cowboy suits. It was realized that before legislation could be passed to control the sale of unsafe clothing a nationally recognized method would be required for distinguishing between safe and unsafe clothing textiles.

The American Association of Textile Chemists and Colorists, together with the National Retail Dry Goods Association, undertook a series of investigations to develop a reliable method of test and apparatus for conducting the test. The Commodity Standards Division was requested to act as a co-ordinating agency to secure national recognition of the method. A number of laboratories made extended series of tests to correlate the method with the practical experience of the industry.

Recent publicity arising from the discovery of highly flammable brushed rayon sweaters on the market speeded up the work on the development of a standard for the flammability of clothing textiles. It is now being circulated for acceptance by industry. When the acceptances represent a satisfactory proportion of the producing industries, the standard will be considered established.

The standard represents the combined opinion of an industry committee representing cotton and rayon producers, and fabric manufacturers, finishers, converters, wholesalers, retailers, and consumers, co-ordinated by the American Association of Textile Chemists and Colorists, and the National Retail Dry Goods Association.

It is to serve as a guide in the manufacture and sale of only those clothing textiles which are not dangerously flammable. It provides standard methods of testing clothing, and textiles intended for use in clothing; establishes three classes of flammability, Class 1, covering those textiles generally accepted by the trade as having no unusual burning characteristics; Class 2, covering those textiles recognized by the trade as having flammability characteristics between normal and rapid and intense burning; and Class 3, covering those textiles recognized by the trade as being unsuitable for clothing because of their rapid and intense burning; and it establishes limiting requirements for identifying each of these three classes. The methods of tests and classifications for flammability are the same as those recently approved as a standard of the American Association of Textile Chemists and Colorists.

Mimeographed copies of this standard, TS-5131, may be obtained by addressing a request to H. A. Ehrman, Commodity Standards Division, Office of Industry and Commerce, U. S. Department of Commerce, Washington 25, D. C.

N.P.A.-Approved Projects Top $336 Million

Approval of applications for second quarter, 1952, allotment of materials for construction of 55 textile expansion building projects at an estimated cost of $336,199,448 has been announced by the National Production Authority. N.P.A. announced that virtually all applications on hand for both industrial and commercial construction projects will be approved for allotment in the third and subsequent quarters.

Hunt Presents Loom To Textile School

A 40-inch, automatic loom was presented to the School of Textiles at North Carolina State College March 12 by Hunt Loom & Machine Works, Inc., manufacturer of the only complete loom built in the South. Prof. Benjamin L. Whittier, head of the department of fabric development and construction in the college's School of Textiles, said it is the fastest-moving loom ever owned by the school. It runs 192 picks per minute and is capable of running 204 picks a minute. It is a single-shuttle, cam loom.

Presentation of the valuable piece of machinery to the School of Textiles now brings the total number of looms installed at the school up to 60.

Following the installation of the equipment—valued roughly at $1,500—the loom was inspected by Dean Malcolm E. Campbell of the North Carolina State College

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School of Textiles and Robert M. Hanes of Winston-Salem, N. C., president of the Wachovia Bank & Trust Co. and chairman of the finance committee of the North Carolina Textile Foundation, Inc., an organization supporting the work of the School of Textiles.

The Hunt loom weaves sheeting, print cloth, and a wide range of other textile goods. The North Carolina State College School of Textiles, Dean Campbell and Professor Whitier said, now has looms for handling virtually every weaving process, ranking from the making of rugs to print cloth.

L. W. Bishop, until recently manager of Hunt Loom & Machine Works, Inc., made the arrangements to present the loom to the State College School of Textiles. The gift was suggested by Mr. Hanes, who has long been an active supporter of the college and its School of Textiles in his capacity as a director of the N. C. Textile Foundation.

March Rayon Shipments Are Listed

Shipments of all types of rayon and acetate during March totaled 75,700,000 pounds, a decrease of seven per cent from the 81,400,000 pounds shipped in February, according to the *Textile Organon,* statistical bulletin of the Textile Economics Bureau, Inc. Domestic shipments of rayon and acetate yarn and fiber during the first quarter of 1952 amounted to 247,500,000 pounds, a decrease of 22 per cent from the 317,600,000 pounds shipped in the first quarter of 1951.

Total stocks held by producers at the end of the first quarter amounted to 119,700,000 pounds, an increase of approximately 4,700,000 pounds from the end of February. The *Organon* points out that this stock increase occurred in spite of continued cut-backs in production in some categories of rayon and acetate yarn and staple. Viscose high tenacity yarn and viscose+cupra staple plus tow production were operating at or near capacity levels. On the other hand, acetate yarn, acetate staple plus tow, and the viscose+cupra regular and intermediate tenacity yarn segments of the industry operated at substantially reduced levels during the first quarter of the year.

Imports of rayon staple by the United States during February totaled 9,447,000 pounds, a figure that represented a substantial increase over the level of imports in the six months preceding February and approximating the high levels in the early part of 1951. Imports of rayon filament yarn during the first two months of 1952 amounted to only 45,000 pounds with three countries, the Netherlands, Canada and Switzerland, supplying the bulk of it. In the January-February period of 1951, a total of 2,482,000 pounds of filament yarn were imported.

A new spot check on rayon and acetate capacity has been made by the *Organon* to adjust projected capacity figures released at the end of last year. This revision has been made necessary by the announced plans of several producers to switch from production of regular and intermediate tenacity viscose yarn to high tenacity viscose yarn in view of the slowness of the regular tenacity viscose yarn market compared to the active status of the high tenacity yarn.

There has been no change in the projected capacity of the acetate yarn and the acetate staple+tow industry, but substantial changes in the capacity of the different types of viscose rayon are apparent.

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third quarter of 1952. This shows a 73,000,000-pound increase over the actual capacity in November, 1951, and will be realized by some increase in the number of new spinning nozzles installed or to be installed. By far the largest part of the increase, however, is due to the conversion of regular tenacity filament yarn capacity.

An additional 40,000,000 pounds of high tenacity capacity is expected to be realized by April, 1953, and in late 1953, the production facilities of the industry are expected to be capable of producing 504,000,000 pounds, annual rate.

Declines in the output facilities of viscose+cupra regular+intermediate yarn are expected to occur in the changeover, the *Organon* points out. By the third quarter of this year, capacity will decline to 282,000,000 pounds, annual rates, as compared with 339,000,000 pounds actual capacity in November of 1951. By the end of 1953, according to present plans, the capacity will be down to 277,000,000 pounds.

The projected figures, according to the *Organon,* are made up of some increases resulting from newly installed spinning nozzles and some decreases due to conversion to rayon staple production, but the main decrease in regular and intermediate yarn capacity is due to the conversion to high tenacity producing facilities.

Because of the conversion expense involved, the principle poundage of these conversions will be of a permanent nature. But some of the new poundage is reported to be flexible and could be reconverted, comparatively easily, to the regular tenacity type viscose yarn.

Viscose+cupra staple+tow capacity, amounting to 218,000,000 pounds in November of 1951, is expected to increase to 235,000,000 pounds during the third quarter of 1952 and to a total of 360,000,000 pounds early in 1953. The main increase here is due to newly installed capacity, but there is planned some conversion of poundage from regular tenacity viscose yarn to viscose staple.

On an over-all basis, from the recent capacity study, it can be seen that the projected increase, which was expected at the end of last year to yield a total of 1,702,000,000 pounds by late 1953, will be 1,714,000,000 pounds or an over-all increase of 12,000,000 pounds.

A recently completed analysis by the *Organon* reveals that the total consumption of wool, cotton, rayon, and acetate for military purposes in 1951 amounted to 615,000,000 pounds or nine per cent of the total of these fibers consumed. Raw wool used by the military last year is estimated at 170,000,000 pounds or 41 per cent of total wool consumption. This includes wool cloth produced for the government stockpile but does not include any purchase of raw wool under that stockpiling program. Raw cotton consumed for military purposes last year totaled approximately 370,000,000 pounds, roughly 2½ per cent of total cotton consumption.

The Armed Services last year took 60,000,000 pounds of high tenacity viscose rayon yarn, principally for the production of tires. This was 18 per cent of the total shipments of this type of yarn to tire manufacturers in 1951. In addition, a total of 15,000,000 pounds of regular+intermediate tenacity viscose and acetate filament yarn and staple+tow is estimated to have been used, or two per cent of the total shipments of these products.

The *Organon* notes that, in general terms, the consumption of all fibers by the military was at a peak level in the second and third quarters of 1951 with a substantial reduction of fiber consumption in the fourth quarter, particularly in the case of wool.

A study made by the *Organon* on exports and imports of man-made fibers indicates that there has been a reversal in 1951 of the downward trend in total exports which reached a peak of $307,717,000 in 1947. Total exports last year were valued at $226,448,000, a figure that was only slightly below the second largest year in 1948. Exports in 1951 were 15 times as large as the $15,288,000 value of man-made fibers and products exported in 1939.

The 1951 exports of different types of man-made textiles totaled approximately 140,000,000 pounds, a total 28 per cent greater than the 109,000,000 pounds in 1950 and only slightly less than the record 142,000,000 pounds in 1949. Divergent year-to-year changes in the poundage and dollar value, of course, follow unit changes in stated value of exports which vary according to market prices.

Exports of raw materials in the man-made fiber category such as yarn, fiber, and tire fabric in 1951 totaled 64,300,000 pounds, an increase of 34½ per cent over the 47,800,000 pounds exported in 1950. In the semi-manufactured goods exports, the 1951 total was 53,100,000 pounds or 20 per cent greater than 1950. In the exports of manufactured goods, the poundage total amounted to 23,000,000 pounds, an increase of 33 per cent over the poundage of 1950.

On the import side of the picture, poundage shipments to the United States from abroad of rayon and acetate declined slightly in 1951 from the all-time high level of 1950. But the dollar value of 1951 imports was at an all-time high level due principally to the high per-pound value of the staple imported. Although import classifications do not differentiate between rayon and acetate, it is known that the imports consisted mainly of viscose rayon in its different forms.

Device For Making Longitudinal Sections

The research division of Callaway Mills Co., LaGrange, Ga., has developed a device, given the trade name Callatome, which is said to provide a simple, precise and rapid method of making longitudinal sections of cords and fabrics for microscopic study. The device is described in the March issue of *Textile Research Journal*. It is said to be of particular value in investigating such problems as depth and evenness of penetration of dyes and other fabric finishing materials. The Callatome is being manufactured and marketed under license from Callaway Mills Co. by R. H. Bouligny, Inc., Charlotte, N. C.

Report On Effect Of Ginning On Spinning

Results of a large scale investigation of the effect of various ginning practices on the spinning characteristics of cotton fiber and upon quality of the finished fabric, are described in a report now being distributed by the National Cotton Council.

The report, "Cotton Fiber Properties, Spinning Efficiency and Fabric Quality as Affected by Ginning Practices," is being released by the council's industry-wide committee on cotton quality. It is available to textile mills, laboratories, ginners and others interested in this subject. Copies may be obtained upon request from the National Cotton Council, P. O. Box 18, Memphis 1, Tenn.

The study includes graphs, charts and other statistical data. It describes in detail the findings of tests conducted in 1950-51 under commercial production method in six

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gins—two each of three makes—and in 17 mills in which a great variety of equipment was used. Ginning tests were carried out in two main areas of the cotton belt. In each area, three pickings were made, one being hand-picked and the other two harvested by spindle-type pickers, for each of three makes of gins. Enough blended seed cotton was obtained from each picking to produce 25 bales of lint cotton.

At each gin, five test runs of five bales each were made in accordance with the following schedule: (1) without modification of the usual practice, that is, so-called "normal" ginning; (2) as in (1) except at a faster rate; (3) as in (1) except the overhead cleaners were by-passed; (4) as in (1) except the lint cleaners were by-passed; and (5) as in (1) except at higher temperature.

A summary of the tests at the beginning of the report points out: (1) In the case of ginning with an excessive rate of feeding, the only significant results were a slight decrease in grade index, a general increase in the strength of 30s warp and 40s filling yarns, and a slightly improved appearance of 40s filling yarns.

(2) By-passing overhead cleaning, which varied both in kind and amount from gin to gin, reduced the grade by about one-third grade and slightly increased the staple; caused some increase in mill waste and greatly increased the trash in card web; did not affect the number of neps either in card webs or in the cloth, but did reduce the neps in raw cotton, i.e., in the cotton as received at the mills; and increased the strength of yarns and cloth.

(3) When the lint cleaners were by-passed, there was a slight reduction in grade index and an increase in mill waste and in trash in card webs. The number of neps in the raw cotton was not affected, although there was a decrease in neps in the mill-made web and in the dyed cloth.

(4) Use of an excessive amount of heat in drying the seed cotton resulted as follows: (a) Grade index was increased while moisture content of the lint was markedly decreased. (b) There was an increase in the number of ends down and while there was no increase in the nep count in card webs, there was an increase in neps in dyed cloth.

Apparatus Evaluates Warmth Of Fabrics

A new apparatus for measuring the warmth properties of cotton and of other textile fabrics, promises to be useful in commercial application as well as in research to improve the utilization of cotton, the U. S. Department of Agriculture said April 14.

Dr. G. E. Hilbert, chief of the Bureau of Agricultural and Industrial Chemistry which developed the apparatus, said the equipment was designed and assembled at the Southern Regional Research Laboratory in New Orleans to fill a specific need of its textile testing section in evaluating the warmth of experimental cotton fabrics, but that certain features of the new development have attracted the attention of other laboratories and of industry as well.

Although warmth is an important service requirement of many textile fabrics, it is a difficult property to evaluate, and there is no generally accepted test despite the fact that many different methods have been developed by various laboratories. With most of these methods the warmth value of a fabric is rated by determining the difference in energy required to maintain a warm body at constant temperature in cold air when uncovered and when covered with test material. The apparatus developed at the Southern laboratory applies this same principle, but instead of testing in still air the fabrics are subjected to a simulated wind along with low temperatures.

A metal "arm" clothed in a sleeve of the test fabric is lowered into a commercially-made home freezer in which a fan has been installed to maintain a wind velocity of 12 to 13 miles an hour over the surface of the fabric. This combination of wind with cold temperatures, which can be adjusted as desired, provides a better means of evaluating fabrics under conditions similar to those prevailing in Arctic regions and other cold climates, than is provided by the more usual tests under still-air conditions.

Outlets for cotton in both military and civilian uses may be greatly increased by improving cotton's warmth-retention properties, and the new apparatus for evaluating these properties is a step in this direction, Dr. Hilbert said. He explained that some cotton products, before they are laundered, give the same degree of warmth as wool products of the same thickness and weight; but when cotton materials are washed the fibers often lose their fluffiness and mat together, thus cutting down on the number of air spaces and their effectiveness in retaining heat. If cotton can be made to retain all or even a large percentage of its original physical properties and warmth value after repeated laundering and long use, it will find new outlets as well as increased acceptance in a number of products.

The warmth testing apparatus developed at the Southern laboratory has already been used to evaluate a number of experimental cotton fabrics and to compare them with cotton and other fabrics which are commercially available. A model of this same apparatus is being built and installed by a large merchandiser for use in evaluating the warmth of various textile materials sold to consumers, and several other companies have expressed interest in the equipment, B.A.I.C. officials said.

Souther Discusses Waste Disposal Problem

R. H. Souther, research director of Cone Mills Corp., Greensboro, N. C., in an address recently before the Southern Municipal and Industrial Waste Conference at Raleigh, N. C., stated that the South's stream pollution abatement and water conservation programs are faced with an urgent need for further research in individual plant problems.

Mr. Souther, chairman of the research committee on stream pollution of the Piedmont Section of the American Association of Textile Chemists and Colorists, was one of several industrial and municipal experts who appeared on the final program of the two-day conference.

In his talk, Mr. Souther emphasized that North Carolina's stream pollution control and the conservation of its water resources "may be best accomplished through close co-operation between the State Board of Health and the industries."

He declared that the textile industry "long has had an interest in the treatment of textile wastes" and said that his company alone has spent hundreds of thousands of dollars during the past 30 years on chemicals to treat textile wastes. The textile industry, he said, has been "very co-operative" in fighting pollution and has not received due credit for its work in this respect.

He pointed out, however, that the proper utilization of the water resources and the solution to the pollution problems "are going to take everybody, including the scientific

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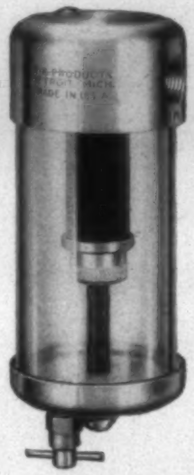

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societies, industries, municipalities, colleges and State agencies."

"The rapid increase of textile processing in this State during the past 50 years," Mr. Souther said, "created a need for research in textile waste disposal and means of preventing stream pollution. The chemicals used in treating textile trade wastes have for many years been the same as now, although one new one, calcium chloride, was developed by Cone Mills in 1920 for treating waste from indigo and sulfur dyeing operations.

"This early research was further followed by the Cone Mills group on waste at plants in Greensboro in collaboration with the State Board of Health, City of Greensboro, and the University of North Carolina, under the co-ordination of the Textile Foundation.

"The contributions from these studies have been the chief source of data for research in textile wastes and a deep debt of gratitude is due these pioneers for their findings in stream pollution problems.

"In spite of all the vast array of published data, there is still an urgent need for further research in individual plant problems. We feel that in the textile industry as well as in other industries, the greatest benefits from research can be obtained in studies to eliminate waste at the source in the plant.

"However, there are so many useful parallels that we should take advantage of the many good studies that have been made, particularly since many of them may give us a valuable approach to a new study."

Southeast A.A.T.C.C. Unit To Meet May 3

The Southeastern Section, American Association of Textile Chemists and Colorists, will hold its second meeting of the year May 3 at the Ralston Hotel in Columbus, Ga.

The technical session will get underway at 2:30 p.m. and will feature two speakers. Dr. D. E. Marnon of General Dyestuff Corp. will speak on the widely-discussed Marhen process and Jackson A. Woodruff of American Viscose Corp. will talk about the new Avcoset process.

The evening session will consist of a banquet in the hotel. Sam Hayes, a vice-president of the A.A.T.C.C., will be guest speaker at the banquet and will discuss activities of the national association.

Report Progress On Waterproof Textiles

Progress made by research scientists working for the Army Quartermaster Corps in developing water repellent fabrics and clothing is described in a report now available to the public, the Office of Technical Services of the U. S. Department of Commerce announced recently.

Prepared for the Quartermaster Corps by one of the laboratories which played a prominent part in this research program—the Harris Research Laboratory—this 186-page report represents a summary of the research in the field of water resistance of textiles carried out by the Army Quartermaster Corps during World War II and in the period that immediately followed.

The report details the following major technical advances achieved by this investigation:

(a) *Basic technique for measuring water resistance.* A description is given of a rain room developed during the war at the Philadelphia Quartermaster Depot to simulate accurately the conditions of natural rainfall. By suitable arrangement of special nozzles, the rain room accurately reproduces the three important parameters of natural rainfall-intensity, drop size and velocity. This rain room, and a rain course later constructed on the same principle at Fort Lee, Va., provide dependable and accurate procedures for measuring rain resistance in the laboratory and in the field.

Having developed this basic and dependable technique for evaluating rain resistance, scientists were able, by applying it, to accurately evaluate water resistant garments and fabrics. Furthermore this new testing technique played an important role in determining the inherent water-resistance of different textile structures and the efficacy of various water repellent compounds.

In addition, correlations were established between the results of rain room tests and those of a number of different conventional laboratory tests for water repellency, consequently standard laboratory repellency data can now (within certain limits) be translated into terms of protection time under actual rainfall.

(b) *Fabric design for water resistance.* The investigations also followed up a lead that had already been discovered by British scientists—that the design of a fabric had much to do with its water repelling power. Using the rain room, they were able to get a more exact evaluation than was previously possible of the effect of a textile material's structure on its resistance to penetration and absorption of water. "These data led to the revision of previous concepts and the formulation of some new concepts regarding the design of water resistant materials which will probably lead to further improvement in the future."

(c) *Water repellent treatments.* The physics of wetting, as well as the mechanism of water repellency are discussed in the report, with special emphasis on the study of treating systems and the durability of water repellent agents. "This study has led to specific improvements in application technology and to the development of improved laundering procedures to maintain the effectiveness of water repellent fabrics in use."

(d) *Water-repellent garments.* Concerning the design of water-repellent garments, the report stresses the value of the double layer principle in improving rain protection and also the importance of sewing the garments with water-repellent thread so as to avoid penetration of the seams by capillary action.

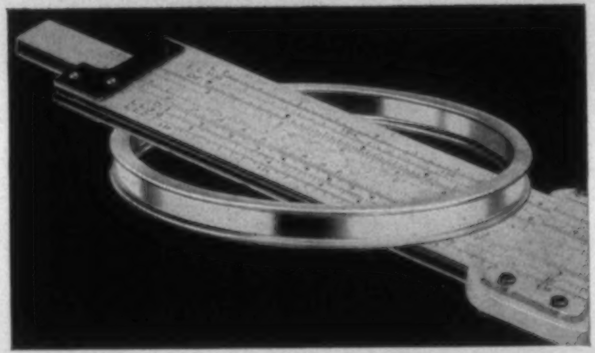
(e) *Water-repellent wool.* A special section is devoted to a study of the repellency of wool fabrics and garments.

PB 105 661, *Quartermaster Research on Water-Resistant Textiles,* 186-pages including diagrams, graphs and tables sells for $5. Orders should be addressed to the Office of Technical Service, U. S. Department of Commerce, Washington 25, D. C., accompanied by check or money order payable to the Treasurer of the U. S.

Plan To Expand Hydrogen Peroxide Output

Expansion goals for hydrogen peroxide and for high purity oxygen calling for 45,400,000 pounds of the former and 34,600 million cubic feet of the latter by Jan. 1, 1955, were announced recently by Ralph S. Trigg, deputy administrator of the Defense Production Administration for Program and Requirements.

The hydrogen peroxide goal represents an expansion of 22,300,000 pounds over the Jan. 1, 1951, capacity. High purity oxygen expansion represents a gain of 12,800 million



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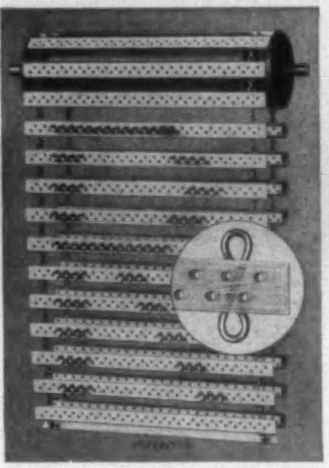

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cubic feet over the 1951 inventory and provides for 5,430 million cubic feet of production facilities in addition to those presently under construction or planned.

D.P.A. said it already has received acceptable applications for certificates for rapid tax amortization which will cover the required hydrogen peroxide expansion, and that no further applications can be considered at this time.

The increased production of hydrogen peroxide is required to meet growing demands in all consumption areas. Military requirements for concentration hydrogen peroxide (90%) are potentially high, but at present military consumption is restricted primarily to research and experimentation. From 75 to 90 per cent of the textile industry, the largest consumer of hydrogen, is reported to have converted from the use of chlorine bleach to peroxide bleach.

Tax amortization certificates have been approved for 6,946 million cubic feet of high purity oxygen production capacity expansion (including 445 million cubic feet completed in 1950), and applications are pending for production capacity expansions totaling 869.5 million cubic feet. The vast bulk of high purity oxygen is consumed in the manufacture of steel and the fabrication of steel products.

Develop New Rhonite Fiber Container

A small hole and air pressure have solved a bothersome container problem for customers of Rohm & Haas Co. Some time ago, the company's textile division recognized the desirability of a new package for Rhonite 610, a monomeric urea-formaldehyde paste used for shrinkage control and crush resistance of rayon and cotton textiles.

Formerly, Rhonite 610 was put up in 41-gallon double-lacquered steel drums, which have been difficult to obtain when steel supplies were critical. The Rohm & Haas packaging group, working with the Virginia Barrel Co. of Chester, Pa., agreed that a fiber drum would serve as efficiently as steel, would be more convenient, and would not contaminate the Rhonite through failure of a lacquer lining.

In designing the container the question arose: "How are you going to get the 400 pounds of semi-solid Rhonite out of a fiber drum?" With a steel drum it was relatively simple. Warming the outside of the container liquified the material sufficiently so that it could be removed easily. It was obvious that fiber could not be handled in this manner.

Solving this problem required ingenuity, but proved fairly simple. A one-half-inch hole was drilled in the bottom of the drum and plugged with a cork. Now to remove the Rhonite, the cork is pulled and air pressure applied at the hole. The Rhonite then slides into the mixing vat. Ten pounds pressure is all that is required to do the job.

Only these steps are necessary to remove Rhonite 610 from the new containers: (1) Hoist drum over mixing tank; remove band and cover. (2) Uncork hole and apply air pressure.

Acrilan Items To Reach Market This Fall

William G. Luttge, general sales manager of the Chemstrand Corp., announced April 16 that fabrics and garments of the firm's new acrylic fiber Acrilan, until now held under wraps of research and development, will reach retail markets this Fall. Acrilan, basically a product of natural gas and air, has been in the hands of chemists, physicists and research specialists who have concentrated for several years on development of all the characteristics of the fiber to meet the wide range of conditions imposed by the textile industry.

"Acrilan has undergone intensive research in our laboratories and pilot plant and in many leading textile mills and with converters in order to bring to the public a new fiber that will meet the diversified range of end-use applications with the highest degree of efficiency," Mr. Luttge said. "We also have correlated the laboratory and mill findings with field tests."

Mr. Luttge pointed out that the Fall appearance of fabrics and garments of 100 per cent Acrilan or Acrilan in high-percentage blends with existing commercial fibers will be backed by a concentrated national advertising program as well as point-of-sale promotion across the country. He said the program calls for simultaneous appearances of several units of Acrilan fabrics and apparel items to reach a majority of the consuming public in major markets.

Acrilan fiber has been spun or woven into many garments upon which a full range of evaluations have been determined to "our satisfaction that we can furnish the consuming public with the properties they seek, primarily crease retention, wrinkle resistance, washability, quick drying, durability and wearability, lightness of weight, warmth of hand, and fabrics that will 'breathe' equally well in Winter or Summer weight materials."

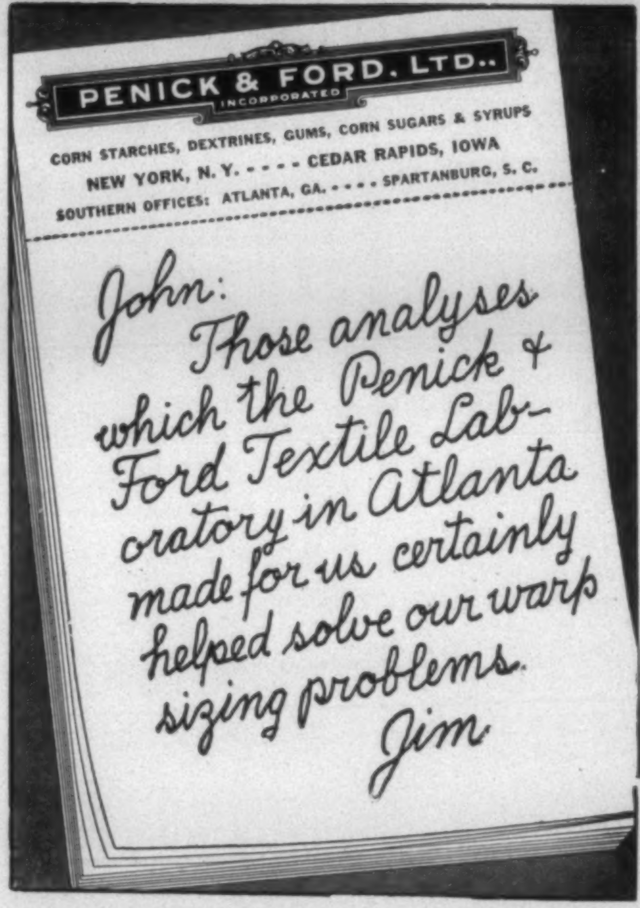
"Textile mills," Mr. Luttge continued, "while vitally interested in these considerations, also demand fibers that will process well on existing mill machinery with minimum modification, and will offer excellent dyeability qualities."

Mr. Luttge said the Fall consumer promotion will include men's and women's suitings; dresses, blouses and skirts, featuring permanent pleats; sports shirts and slacks; across-the-counter yardgoods, and blankets. These will embody fabrics of 100 per cent Acrilan as well as blends ranging upward from a minimum 50 per cent Acrilan content, a minimum "at which we are confident that this and higher percentage content blends impart most of the inherent qualities of the fiber."

Also emerging from development stages are Acrilan sweaters, socks and underwear. Blankets, Mr. Luttge said, will comprise a 100 per cent Acrilan utilization and will be completely washable in home laundries without the risk of shrinkage. On the other hand, some garments and yardgoods will comprise blends of Acrilan with wool, cotton, rayon, nylon or other fibers now in commercial use, and in these instances the washability, crease retention and wrinkle resistant features will depend on the fiber content. However, findings indicate that pleats set in a dress of 80 per cent Acrilan, 20 per cent wool, for instance, will be permanent with a high degree of wrinkle resistance whether the garment is washed or dry cleaned. Sport shirt and slack material will be completely washable with every degree of safety, Mr. Luttge added. To insure the buying public of the fiber content, each garment will be labeled with complete instructions regarding handling.

Development of Acrilan has progressed at a rapid pace in recent months in order to meet fiber demands that have built up in the trade and consumer circles, Mr. Luttge explained, adding that the company is confident of a ready acceptance on the part of the textile mills, the converters and the general public.

"As a newly-organized but well-founded corporation consisting of specialists from the chemical and textile industries," he said, "our position has been one of progressing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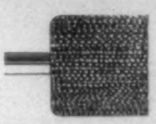

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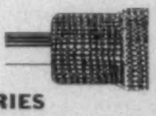

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"Chemstrand is in a position to render high specification service to the textile trade and fiber in ever increasing quantity to meet their customer demands. The Acrilan plant now nearing completion at Decatur, Ala., will have an initial rated capacity of 30,000,000 pounds of staple annually."

Spring fiber ouput of the company's pilot plant, which has been operating at Marcus Hook, Pa., since November, 1950, is being processed into fabrics and garments for the Fall trade, Mr. Luttge elaborated. This output will be supplemented at accelerated rates when fiber production starts at Decatur.

Chemstrand is in an interesting period of organization which had its beginning March 25, 1949, when elements of the chemical industry behind synthetic fibers joined with the textile industry to research and develop new fibers. Chemstrand forged ahead with the fibers and at the same time undertook the construction phase by starting large production facilities at Decatur and also Pensacola, Fla.

In addition to the Acrilan manufacturing plant at Decatur, the company also located there its administrative headquarters and multi-unit research and development center. Upon completion late this year, these facilities will employ nearly 1,000 persons engaged in administrative activities, research and development, and in Acrilan production.

The second plant is under construction near Pensacola for the manufacture of 50,000,000 pounds of Chemstrand nylon filament yarn per year. This plant is scheduled for completion in 1953 with full output anticipated for early 1954.

Cotton Floor Covering Consumption At Peak

The National Cotton Council April 13 estimated total consumption of cotton floor coverings in the United States in 1951 at 41,800,000 square yards, an all-time record. The estimate covered consumption of tufted and woven bath mats, scatter rugs and broadlooms. It was developed in a survey by the council's market research division, based on confidential figures of individual companies and interviews with leading manufacturers.

Wholesale dollar volume of cotton floor coverings was estimated at $125,000,000. Some 214,000 bales of cotton were consumed in the production of all-cotton floor coverings.

The previous record year was 1950, when consumption of cotton floor coverings was 33,000,000 square yards, dollar volume at wholesale was $99,000,000 and 167,000 bales of cotton were consumed. Cotton has shown steady gains as a rug and carpet fiber every year since 1939.

Japan Largest Cotton Goods Exporter

Japan was the world's biggest exporter of cotton goods in 1951, according to a recent report of the British Cotton Board. This marks the first time since World War II that Japan has taken over the leadership in that field. In 1950 India was the world's leading exporter of cotton goods, followed by Japan, Britain and the United States. Last year, however, the order was Japan, Britain, the United States and India.

Canadian Textile Seminar Set Sept. 11-13

The third Canadian Textile Seminar will be held at Queen's University, Kingston, Ont., on Sept. 11, 12 and 13, 1952, with registration set for the evening of Sept. 10. Originally scheduled for Sept. 18, 19 and 20, the seminar was moved forward following consultation with university officials on the matter of accommodation. Structural changes are being made to certain university buildings which eliminated their use on the original dates.

J. A. Dixon, general chairman, in making the change of date announcement, states that 500 textile technicians were expected to attend the seminar from Canada, the United States, and Great Britain, and that all possible accommodations would be needed.

The Textile Technical Federation of Canada, co-ordinating body of six associations of technicians, has organized

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and sponsored these biennial seminars since 1948. Aim is to provide regular medium through which the world's top textile experts can exchange information.

Member associations of the federation, the Canadian Association of Textile Colourists and Chemists, Quebec and Ontario Sections; the Textile Society of Canada, Eastern and Western Divisions; the Ottawa Valley Textile Association, and the Cornwall and District Textile Association, have long been interested in improving and spreading textile education in Canada.

Among those aiding Mr. Dixon in preparing for the seminar are: F. Porteous, Dominion Rubber Co., Ltd., Kitchener, Ont.; manufacture of textiles from man-made fibers: J. E. Kelly, Courtaulds (Canada), Ltd., Cornwall, Ont.; S. W. Milnes, Ayers, Ltd., Lachute, Que.; Dr. C. H. Bayley, National Research Council, Ottawa, Ont.

Campbell Scores N.E. Conservatism

A native New Englander, now a leading textile educator in the South, recently pointed to traditional New England conservatism as being the cause for the slump in the area's textile business. Speaking out against Northern pleas to Congress for preference in awarding of defense contracts, Dean Malcolm Campbell of the North Carolina State College School of Textiles stated that such action would give only temporary relief.

Failure of New England textile leaders to adopt new and modern techniques, he said, has resulted in their present predicament and the shift of textile advancement to the South. "A realization that better productivity per worker and more modern techniques and equipment would go a long way toward solving the Northern textile industry's problems," Dean Campbell declared.

"The Southern textile industry has been quick on its toes, while New England mill owners have been ultra-conservative," he said, adding that the South is now leading the textile field for the same reason that New England once was able to force her way into established British industry, the reason being better production methods.

Cite Advantages Of New Microtome

An ultra-high-precision microtome, designed to cut sections of natural and synthetic fibrous materials to a thickness of five-millioneths of an inch, has been developed at Battelle Institute, Columbus, Ohio. Tissue sections of this size are about one-tenth as thick as those that can be cut with the conventional microtome. They are thin enough to be photographed in the electron microscope which provides about 100 times the useful magnifying power of the light microscope.

The new microtome is expected to enable fullest use of the electron microscope for research on synthetic and natural fibrous materials. It is believed that the textile, leather, paper, and similar industries may find it a particularly useful tool. It may also be used in the medical and biological sciences for studying the cell structure of plant and animal tissue. The American Instrument Co., Silver Springs, Md., has been licensed to manufacture it.

The electron microscope, it was explained, requires tissue specimens to be of the order of five millionth of an inch;

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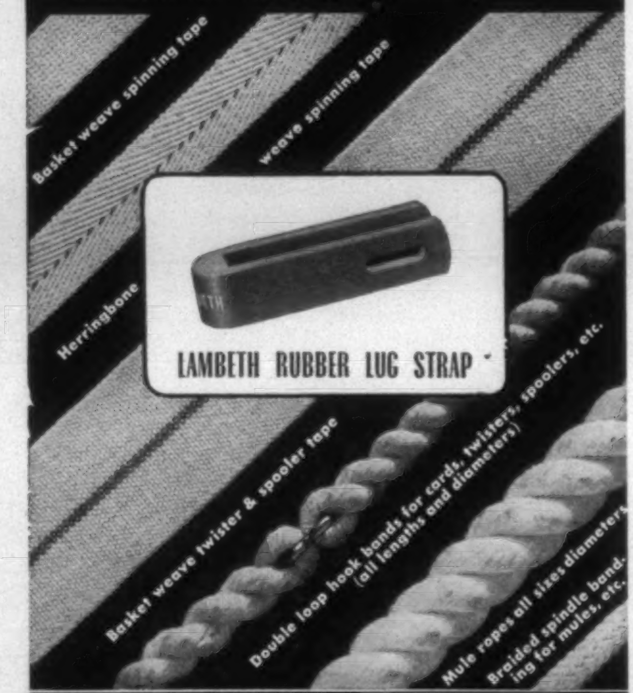
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this is because of the low penetrating power of the electrons which will not pass through tissue of greater thickness.

According to Dr. G. G. Cocks and Dr. C. M. Schwartz, who invented the "cantilever microtome," any tendency for the cutting instrument to deviate from the desired path of motion is controlled by its design features. Motion control permits sections of thickness of about five millionths of an inch to be cut with "exceptional reproducibility."

The conventional microtome, which uses sliding ways to transmit motion of the knife with respect to the specimen, has been adapted to cut tissue thin enough for the electron microscope. Unavoidable play in the ways, however, produces irregularities in the path of the motion of the knife across the specimen. Consecutive specimens, as a result, are of irregular thickness. The new microtome eliminates the problem of bearing play by avoiding all bearings or ways in its construction.

The extreme simplicity of the instrument's design is an outstanding feature from a manufacturing viewpoint. The inventors also point out that the "cantilever microtome" can readily cut the thicker sections of tissue used in routine clinical and research applications of the light microscope. Thus, they conclude, a simply constructed but precise microtome is now available which is capable of fulfilling the requirements of both light and electron microscopy.

Ramie Nearing Commercial Development

Ramie, one of the world's oldest natural fibers, but for many decades the unloved stepchild of the textile industry, appears today to be on the threshold of full scale commercial development. Known and utilized for centuries in the Orient, very little ramie found its way to the Western world where efforts to develop it commercially proved failures, for various reasons.

Collins & Aikman Corp. of Bristol, R. I., however, after a thorough study of the problems to be confronted in growing the fiber and then processing it, has decided to develop the fiber commercially—not as a substitute for cotton or other fibers—but as a significant new fiber with important superiorities.

Collins & Aikman has for many years used a small quantity of ramie yarns for a particular high quality upholstery. The firm's laboratory, however, after considerable research, believes the fiber has many other important end uses. For example, its more absorbent but faster drying qualities make it the ideal fiber for bath towels, swim suits and diapers, they state.

Ramie is currently being grown on 500,000 acres in the Florida Everglades and Collins & Aikman has a decorticating plant there for removing the fiber from the stalk.

Develop New Yarn Cleaner-Slub Catcher

A device which removes trash, neps and slubs from spun yarns has been developed for use in the Gastonia, N. C., plant of Associated Spinners, Inc., it was disclosed recently by Milton E. Tager, president.

The device attaches to a yarn winding machine and is mechanically traversed. Slubs or thick places in the yarn are "broken out" at any predetermined diameter of the yarn cross section by varying settings of the "slubcleaner," as it is called. According to Mr. Tager, it has been used on cotton, wool and synthetics. Its use has resulted in a substantial decrease in inspection rejects and, it is claimed, in the need for burling and mending of woven and knitted fabrics made of yarn processed through the device.

Invented by Mr. Tager, it will be marketed by winding machinery manufacturers.

Russia May Purchase British Textiles

Russia has sent out a hint that she might be willing to do something about the seriously unbalanced British-Russian trade situation by buying some of Britain's textiles. And it is reported that the British Government, with its textile industry suffering from a serious slump, could hardly afford to turn down the offer.

Britain buys about three times as much from Russia as she is able to sell her. Russian buying of British textiles would help diminish the present trade deficit—about $100,000,000 in 1952—which results in British money piling up in the Kremlin each month.

Book Themes Competition In Rayon Industry

Harvard University Press, Cambridge 38, Mass., announces publication of "Competition in the Rayon Industry" written by Jesse W. Markham, professor of economics and business administration at Vanderbilt University, Nashville, Tenn. The publishers state that this book is at once the first economic study of the United States rayon industry, a case study in the control of a market by the few, and an exploration of the concept of workable competition. "His historical analysis of the rayon industry's development here and abroad and his analysis of cost and profit data demonstrate that, in this industry, large plants are the most efficient and large firms, for the most part, are the most profitable." It is believed that the book will prove useful to executives in the textile and other fields.

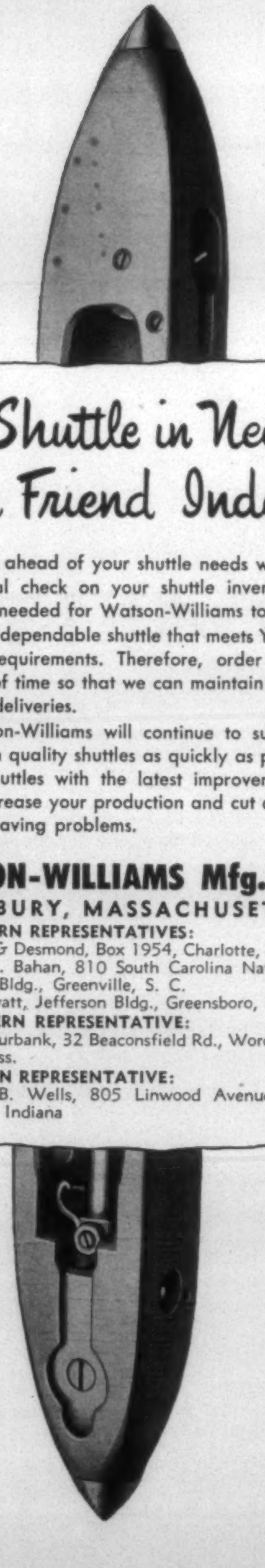
Structural Design Affects Durability

The Wool Bureau, in a recent newsletter to member textile executives, describes how durability of a fabric can be altered by modifying its structural design. Quoting extensively from two published papers on the subject, the Wool Bureau newsletter states, in part:

"The durability of a fabric can be significantly altered without change in the fiber used in its manufacture. Lower rates of abrasive wear can best be obtained by increasing the geometric area of contact between the fabric and the abradant.

"This area can be increased in the normal course of designing a textile fabric, the simplest method being the use of a higher cover factor and balancing the crown heights of the warp and filling. Increased cover factors may be achieved through higher texture or coarser yarns. Crown heights can be equalized by adequate control of crimp. In addition, the use of lower twists is an alternative method of increasing contact areas between individual crowns and the abradant. Finally, the total abrasion-resistance or wear life of cloth is related to the thickness or diameter of that element of the structure which is exposed at the rubbing surface.

"Such modifications can be carried out only within limited ranges, else their beneficial results are offset by secondary factors. For example, if fabric textures are increased excessively, yarn mobility will be severely reduced and rigid knuckles will form which are incapable of absorbing abrasive energy without early failure of surface fibers. Use of



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overly large diameter yarns in one direction and small diameter yarns in the other, stiffer yarns remain uncrimped. This condition will lead to an actual early damage to the exposed, lighter yarns. Yarn cohesiveness may be so reduced by the use of low twist that excessive damage may soon occur through the snagging and slippage of loosely bound surface fibers.

"In many cases fabrics are subjected to both abrasive and tensile stresses during use. In designing more durable cloth to meet the requirements of the above conditions, it is recommended that strong yarns be used in the direction of applied stresses and that these yarns may be buried below the exposed surface. Protection of the stress-bearing yarns be effected by the control of the crimp in the design and manufacture of the cloth. Geometric relationships in plain-weave fabrics have been developed to the point where the relative protrusion of one system of yarns above the other can be readily designed and accomplished in the course of fabric weaving and finishing.

"Maximum damage in wear of a fabric will occur when the direction of rubbing is perpendicular to the exposed floats. Therefore, it is desirable to orient the fabric in the design of clothing, so that exposed floats are parallel to the predominant direction of rubbing. Unfortunately, this is not possible where abrasion and tensile-stress directions coincide.

"Fabric durability is enhanced by increasing the compressive compliance at the rubbing surface. This may be done by modification of the structure of the cloth itself, or by the use of soft backing materials. Local yarn compliance is also important to promote stress distribution at points of contact, and it must be retained within limits when high cover factors are utilized to increase the bearing surface. Where high cover factors are required for purposes of water and wind resistance, it is desirable to utilize structures with fewer intersections per unit area in order to avoid jamming and knuckling of yarn crowns.

"Twills and sateens do not meet the simplified assumptions of the plain-weave geometry. However, a first approximation in the design of short-symmetric-float weaves may be made by applying correction factors to the geometric relationships of the simpler structure. These methods break down in the case of long-non-symmetric-float weaves where the cover factors are roughly balanced. This is explained by the fact that the long component of the non-symmetric float will balloon out on one side of the fabric while its short component is buried on the other side. Of the two methods of burying the stress-bearing yarns—through crimp control and through the use of the long non-symmetric float—the latter is preferable in the design of wear-resistant fabrics, because in large scale production it is not practical to specify the crimp.

"As these conclusions are relative, they cannot be used to design a fabric from scratch to meet specific end-uses or to predict its wear life. Their value lies in their application to end-use problems where limited experience and quantitative information are already available. Here they serve to explain the reasons for low durability-weight ratios and point the way to significant improvements in wear resistance consistent with other structural requirements."

Propose Change In Sale Of Wool Standards

The U. S. Department of Agriculture recently proposed discontinuing the sale of partial sets of wool standards and increasing the charge made for full sets of wool and wool top standards. The increase in charges for the sets of wool and wool top standards is required to bring the returns more in line with actual cost to the department. The department points out that present charges were established years ago.

The proposed new charges would be $20 each per set of wool standards or of wool top standards, f.o.b. A complete set of the official standards for the United States for grades of wool consists of 12 mounted specimens of wool from Grade 80s (fine) to Grade 36s (braid). A set of official standards for the United States for grades of wool top consists of 13 mounted specimens of wool top from Grade 80s to Grade 36s. A charge of an additional $4 per set of either standards would be made for shipment outside the continental United States.

Charges for demonstrator types (specimens of individual wool top grades) would be increased to $2. Charges for nine-pound balls of individual wool top grades would be increased to $40. (Wool top is carded and combed wool.)

Discontinuance of sale of partial sets of wool standards is being proposed because few requests have been received for these sets in recent years.

New Sun Finish Embodies Many Features

A new finish which in a single process is said to impart to a rayon fabric the properties of durable water repellency, spot and stain resistance, crush resistance and shrink resistance has been introduced by Sun Chemical Corp. According to Ernest Nathan, vice-president, the new finish also improves wear compared to ordinary resin finishes, improves fastness to washing of many dyestuffs and permits the development of any desired handle.

Donald Gagliardi, director of the developments laboratories of Warwick Chemical Co., division of Sun, which will market the product, is the inventor. The resin is currently available in commercial quantities.

Two types of finish are being initially introduced, one called Noraset A and the other Noraset GG. The latter primarily yields durable water repellency and spot resistance. Neither product has an adverse affect on gas fading of dyes or on the ability of a cloth to be sewn.

Noraset also was said to permit a treated rayon cloth to be washed or laundered by very severe methods where this cloth formerly had to be dry-cleaned. It is currently being evaluated on fabrics other than rayon and considerable promise has been shown on cotton, cotton-nylon blends, nylon-rayon blends and many other combinations including those with wool.

More Than Capital Liquidated, No Doubt

According to a recent report from Hong Kong, the Chinese Communist textile ministry has admitted making a mess of trying to build a textile machinery plant, blaming the fouled up project on an effort to finish the job two years ahead of schedule. A Peiping dispatch carried by the Communist news agency reported that $20,000,000 had been spent on the Ching Wei textile machinery plant, adding that "It will cost $800,000 to keep the building from collapsing." The plant is about 43 per cent finished and already the main beams are cracking and 280 pillars have sunk 6½ inches. The dispatch said several builders "who got filled with the ideas of the capitalistic class" have been arrested.

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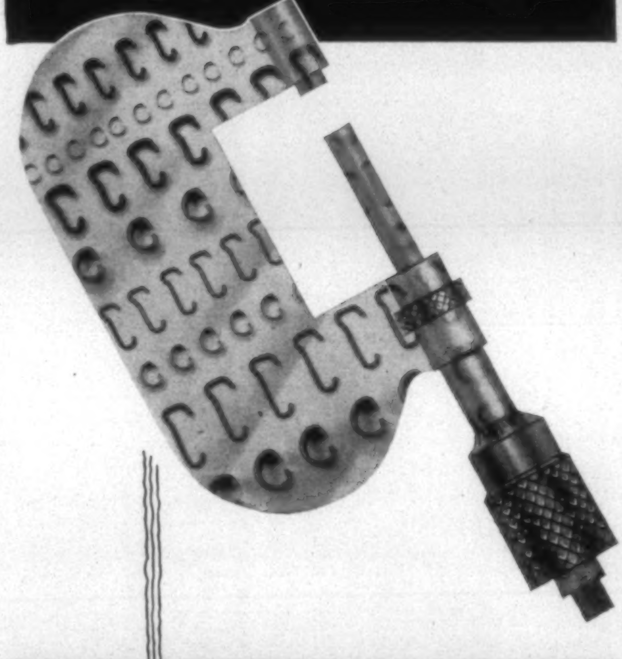

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N. C. Safety Conference Slated May 4-6

The North Carolina Industrial Commission will conduct its 22nd annual statewide industrial safety conference May 4-6 at the George Vanderbilt Hotel in Asheville, N. C.

According to H. S. Baucom, director of the commission's safety division, the program for the event is nearly completed and a number of outstanding figures in the safety field have been secured for the conference program.

Concerning the conference, Mr. Baucom states: "In industry, both employer and employee must know and comply with safety rules and regulations. The problem is not so much one of acquiring additional knowledge and methods but of applying the knowledge and methods we already possess. If these are well-applied a sharp drop in accidental injuries and deaths in North Carolina will be certain.

"We hope to accelerate a general awareness and application of this knowledge and these methods by the industrial safety sections of this statewide conference. With our united efforts in this common cause the safety and welfare of North Carolina's thousands of workers will improve."

Hertwig Scores Present Government Policies

The textile industry wishes to fight its way out of the present depression "under its own steam" without either "coddling" or intervention" on the part of the government, a top industry spokesman said last month. President Charles C. Hertwig of the American Cotton Manufacturers Institute, major trade organization of the textile industry, told the Surplus Manpower Committee of the Office of Defense Mobilization that basic principles, on which the American economy as a whole is founded, are in danger of being sacrificed by present government policies.

The A.C.M.I. president, who is also president of Bibb Mfg. Co., Macon, Ga., cautioned against "junking" the system of free competitive bidding and adopting in its place a program of "preferential and discriminatory" procurement of goods which are in abundant supply.

The committee is holding hearings to study the feasibility of diverting government contracts to labor surplus areas and Mr. Hertwig, heading its list of witnesses, asserted such a plan is neither justified nor workable as far as the textile industry is concerned.

Noting that other witnesses were advocating preferential procurement as a "share the work" scheme, Mr. Hertwig questioned the value of a policy which "by shifting business from one area of unemployed to another area of unemployed, would merely reduce unemployment in one area and increase it in another."

Referring to a plan advanced by the Textile Workers Union, C.I.O., he commented that this proposal would reduce or eliminate third shift work in many mills, and he estimated there are some 125,000 men and women now employed on third shift textile operations throughout the country. "To these people, their jobs mean just as much as jobs mean to first shift employees. Why should they be discriminated against?"

He charged that any policy of contract preferment adds to the burdens of taxpayers, defeats efforts toward greater economy in government procurement, defies the principle of free competition, imposes penalties on efficient enterprise and "hands rewards to the less efficient."

Substitution of preferential procurement for competitive bidding when goods are in ample supply "violates every principle which has been held sacred in American enterprise and in the conduct of government business," Mr. Hertwig said, adding: "These principles are in essence the safeguard of the American interest. If they are thrown into the discard, the public interest becomes the football of favoritism, of undercover influence and special dealing."

Mr. Hertwig said that to deny one company the right to bid for business and to funnel that business to another concern or to another part of the country would be of no help in relieving a depression that is industry-wide, as is the case in the present textile slump.

Current textile unemployment is not due to restrictions, material diversions or similar developments of the defense production program and is thus a problem different from that existing in hard-goods industries, he pointed out. Neither can preferential procurement cure any fundamental, long-standing problems peculiar to certain segments of the textile industry, he added.

Mr. Hertwig reminded the hearing panel members that, geographically, the textile industry has areas marked by patterns of specialization in the types of fabrics they produce and it would be difficult, "if not impossible," to transfer production of specific military goods from one place to another.

At least five-eighths of the government procurement of cotton fabrics is bound by physical factors to certain well-defined areas, he said, adding: "That portion which could be transferred by preferential treatment would be small and fleeting compensation for the principles put to sacrifice."

"The government has taken from us no markets, and whatever demand it has made or is making for our products is merely something added to civilian business," the A.C.M.I. president brought out. "Although most of us could use additional government business, we would not wish such business to be obtained by preferential treatment at the expense of the American taxpayers."

Following is a statement by Sydney M. Cone, Jr., president of the National Association of Finishers of Textile Fabrics, concerning the proposed extension and amendment of the Defense Production Act of 1950:

"The executive committee of the National Association of Finishers of Textile Fabrics is of the opinion that no justification exists today for the continuation of price controls on the finishing of textile fabrics. Our association is convinced that the Defense Production Act of 1950, as amended, should contain provisions for the suspension of price controls on textile finishing, or complete abolition of such price controls. This step can have no adverse effect on the national economy or the purposes of the Defense Production Act.

"Current textile prices are substantially below the O.P.S. ceilings. The same condition applies to the finishing charges of the commission finisher, who processes approximately 70 per cent of the finished cotton fabrics produced each year.

"Costing and pricing of textile finishes is a complex operation. There are thousands of colors and print designs, as well as 578 special finishes in use at the present time. Confusion and uncertainty result from the endless red tape of any price regulation, and, if continued, our industry will be further hampered in its efforts to emerge from the present depressed condition of the textile market.

"In the year immediately following the start of the Korean war, production in finished cotton fabrics amounted to approximately 7.7 billion yards. This rate of production

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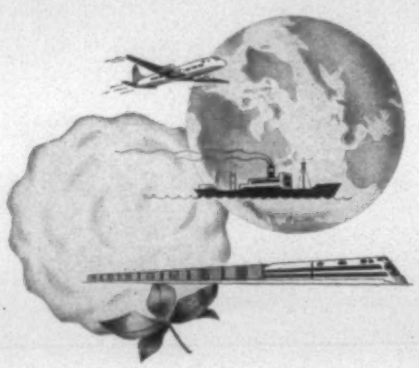

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exceeds the peak reached in the war years and reflects the new finishing capacity built in the post-war period. In the eight-month period since July, 1951, the production rate has dropped 15 per cent as a result of the depressed textile market. Inventories of gray and finished fabrics at the finishing level are estimated to be 25 per cent above the pre-Korean level. It is obvious that the productive capacity of the finishing industry is more than sufficient to meet any foreseeable demands by our national economy.

"We are confident that the Congress does not favor controls on our economy when it is clear that the need has passed. It is our considered judgment that a careful examination of the situation will sustain our recommendation to decontrol prices of textile finishing."

Cotton Consumption For March Listed

The Census Bureau reported cotton consumption for the period of March 2-29 averaged 36,827 bales for each working day. This compared with an average of 45,152 bales for the same period a year ago, and with 39,089 for the February period this year.

Consumption of cotton in the March period was 736,535 bales compared with 768,889 in the February period and 903,041 a year ago.

Cotton on hand March 29 included: In consuming establishments 1,639,474 bales of lint compared with 2,372,414 a year ago. In public storage and at compresses, 3,824,842 bales of lint compared with 3,608,373 a year ago.

Cotton spindles active on March 29 totaled 19,885,000 compared with 19,854,000 on March 1 this year and 20,980,000 on March 31 a year ago.

1951 Carded Cotton Sales Yarn Output

A total production of 651 million pounds of carded cotton sales yarn in 1951 amply demonstrates the ability of the industry to meet the exceptionally heavy demands of the defense program without neglecting its civilian market, A. Henry Thurston, director, textile division, National Production Authority, Department of Commerce, pointed out recently.

Shipments during 1951 amounted to 626 million pounds, or 96 per cent of total production. Of the shipments, 116 million pounds, or 18.6 per cent represented defense-rated orders, Mr. Thurston said. The highest rate of production was reached during the first quarter, when, without undue pressure, the mills pushed their output to 194 million pounds, almost equal to the peak production during World War II.

The first quarter production is chiefly notable, however, because it was obtained with fewer spindles and without the shift to heavier yarns that occurred during the war period. Improved machinery for advanced manufacturing

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techniques are credited with being responsible for the 1951 increase, N.P.A.'s textile division explained.

Declining civilian demand and the failure of military procurement to reach anticipated levels resulted in greatly reduced operations in most mills during the months that followed. In the second quarter of 1951, production of carded cotton sales yarn dropped to 174 million pounds, and by the third quarter it was down to approximately 136 million pounds. The mills producing yarns for duck, webbing and other defense-use products were able to operate at a relatively higher rate than others.

Fourth-quarter production, reported at 147 million pounds, was nine per cent above the third-quarter rate, but still well below the level of the first and second quarters. Increases over the previous quarter were shown in every classification except single weaving yarns, hose cord and thread yarns. The greatest increase was in heavier yarns.

Total shipments during the fourth quarter amounted to 143 million pounds, compared with 126 million pounds in the third quarter. Shipments on defense-rated orders dropped from 25.8 per cent of total shipments in the third quarter to 19.7 per cent in the fourth quarter.

Insulating yarns, the only classification showing an increase in percentage of rated shipments, reached a high for the year of 38.5 per cent. Other yarn classifications having a high percentage of rated shipments included single-weaving (21 per cent), two-ply weaving (16 per cent), other ply weaving (64 per cent) and hose cord (53 per cent).

Hours of operation of machinery in place during the fourth quarter remained at approximately the same level as the previous quarter, but they were considerably lower than for the first two quarters. During the fourth quarter spinning spindle operations averaged 88 hours; twister spindles, 86 hours; and cards, 90 hours a week.

O.P.A. Amendment Aids Manufacturers

Amendment 43 to Ceiling Price Regulation 22, recently issued by the Office of Price Stabilization and which became effective April 5, exempts manufacturers of textile yarns, threads, twines, cordage, nets, laces and fabrics from the requirement that their reports on ceiling prices under Section 32 be made on Form 128.

As a further aid to manufacturers, revised instructions to O.P.O. Public Form No. 128 have been issued clarifying and simplifying the steps for filling out that form. In the formulation of this amendment, there has been consultation with industry representatives, including trade association representatives, and consideration has been given to their recommendations.

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Of Textile Bulletin, published Monthly at Charlotte, N. C., for October, 1951.

State of North Carolina

County of Mecklenburg

Before me, a Notary Public in and for the state and county aforesaid, personally appeared Junius M. Smith, who, having been duly sworn according to law, deposes and says that he is the Business Manager of Textile Bulletin and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Acts of March 3, 1933, and July 2, 1946, embodied in Section 233, Postal Laws and Regulations, to wit:

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SARGENT'S SONS CORP., C. G., Graniteville, Mass. Sou. Reprs.: W. S. Anderson, Carolina Specialty Co., Charlotte 7, N. C.; Philadelphia Repr., F. E. Wasson, 519 Murdoch Rd., Philadelphia 19, Pa.

SCHMIDT MFG. CO., P. O. Box 560, 280-292 North St., New Bedford, Mass. Sou. Plant: Greenville Belting Co., P. O. Box 59, 206 Emile Ave., Greenville, S. C.

SEYDEL-WOOLLEY & CO., 748 Rice St., N.W., Atlanta, Ga., Phone Elgin 5887, Vasser Woolley, Pres. Reprs.: John R. Seydel, V. R. Mills, A. Dillon, Atlanta, Ga.; W. L. Whisnant, Concord, N. C.; W. H. Cutts, Greensboro, N. C.; Welling La Grone, Greenville, N. C., in the Wetting and Finishing Div.; Dr. Paul V. Seydel, David Meriwether, Atlanta, Ga.; J. E. Spearman, Charlotte, N. C. Northern and Export Repr: Standard Mill Supply Co., 1064-1090 Main St., Pawtucket, R. I. (conditioning machinery and penetrants only). Southwestern Repr.: O. T. Daniel, Textile Supply Co., 1602 Cedar Springs, Dallas, Tex.

SHERWIN-WILLIAMS CO., THE, Warehouse and Office: 224 W. First St., E. H. Steger, Mgr., Charlotte, N. C. Sou. Reprs.: Guy C. Brazell, 231 Huron St., Decatur, Ga.; James E. East, 116 Tranquil Ave., Charlotte, N. C.; R. Eugene Roberts, P. O. Box 1302, Greensboro, N. C.; John W. Wheeler, P. O. Box 121, Greenville, S. C.

SIGNAL THREAD CO., INC., Chattanooga, Tenn.

SINCLAIR REFINING CO., Dist. Office, 573 W. Peachtree St., P. O. Box 1710, Atlanta, Ga., F. W. Schwettmann, Mgr., Lubricating Sales; G. R. Dyer, Mgr. Industrial Sales. Area Offices: Atlanta, Ga., Birmingham, Ala., Jacksonville, Fla., Miami, Fla., Tampa, Fla., Columbia, S. C., Charlotte, N. C., Nashville, Tenn., Jackson, Miss., Montgomery, Ala., Raleigh, N. C. Industrial Lubricating Engineers: J. M. Mathers, Columbia, S. C.; T. F. Morrison, Charlotte, N. C.; J. O. Holt, 1220 Dixie Trail, Raleigh, N. C.; W. H. Lipscomb, 414 McIver St., Greenville, S. C.; R. A. Smith, 121 Island Home Blvd., Knoxville, Tenn.; C. C. Nix, 1926 Sixteenth Ave., So., Birmingham, Ala.; T. A. Crossley, Montgomery, Ala.; L. M. Kay and H. G. Lane, 332 Eighth St., N.E., Atlanta, Ga., and H. H. Terrell, P. O. Box 131, Lakeland, Fla.

SINGLETON & SONS, RUSSELL A., Blanco, Tex. Sou. Reprs.: R. T. Hamner, P. O. Box 267, Gastonia, N. C.; Ralph Gossett, Jr., Ralph Gossett Mill Supplies, 15 Augusta St., Greenville, S. C.; James W. Heacock, 609 Hillcrest Dr., Talladega, Ala.; Paul S. Jones, 208 Lane Circle, LaGrange, Ga.; Phil Morgan, 401 S. Lewis St., LaGrange, Ga.; Julian W. Still, 1708 Peachtree St., N.E., Apt. 20, Atlanta, Ga.

SIPP-EASTWOOD CORP., Main Office and Factory, 40 Keen St., Paterson, N. J. Sou. Office: S. Fred Toll, 2116 W. Morehead St., Charlotte, N. C.

SIRRINE CO., J. E., Greenville, S. C.

SLIP-NOT BELTING CORP., Kingsport, Tenn., Otto Cox, Sales Mgr., P. O. Box 3061, Phone 4-3718, Greensboro, N. C.; E. S. Meservey, Ga. and part Ala., 1303 Clairmont Circle, Apt. 2, Phone Evergreen 6852, Decatur, Ga., Phone Dearborn 4523; G. H. Spencer, P. O. Box 1297, Gastonia, N. C., part N. C.; O. L. 'Blackie'' Carter, part S. C., Box 2206, Phone 5-2111, Greenville, S. C.; T. E. Doane, part Tenn., Northern Ala., Ky., W. Va., Box 44, Phone 3100, Kingsport, Tenn.; John R. Youngblood, part N. C., Va., Maryland, Pa. and N. J., Phone 284, 1012 St. David St., Tarboro, N. C.

SMITH & SON, E. E., Gastonia, N. C.

SMITH TEXTILE APRON CO., Gastonia, N. C.

SMITH, YATES D., Gastonia, N. C.

SNAP-ON TOOLS CORP., General Offices: 3046—28th Ave., Kenosha, Wis. Branches at: 380 Techwood Dr., N.W., Atlanta, Ga., Branch Mgr., C. M. Wendell; 1209 E. 25th St., Baltimore 18, Md.; R. C. Lapp, Br. Mgr.: 915 S. Clarkson St., Charlotte 6, N. C.; G. M. Weitz, Br. Mgr., 605 E. McMillan St., Cincinnati 6, Ohio. H. E. Gage, Br. Mgr.; 2932 Commerce St., Dallas 1, Tex., C. C. Boutwell, Br. Mgr.; 1602 Walnut St., Jacksonville 6, Fla., A. B. Woodham, Br. Mgr.; 1040 Camp St., New Orleans 13, La., L. G. Melton, Br. Mgr.; 1617 W. Broad St., Richmond 20, Va., C. F. Wenderoth, Br. Mgr.

SNOWISS FUR CO., B., Lockhaven, Pa. Sou. Repr.: R. E. L. Holt, Jr., P. O. Box 1474, Jefferson Bldg., Greensboro, N. C. Tel. 2-5681 and 2-5438.

SOLVAY SALES DIVISION, ALLIED CHEMICAL & DYE CORP., 40 Rector St., New York, N. Y. Sou. Branch: 212 S. Tryon St., Charlotte, N. C.; H. W. Causey, Branch Mgr. Sou Reprs.: Earl H. Walker, High Point, N. C.; Richard Hoyt, 1216 Edgewood Ave., Jacksonville, Fla.; Robert P. Baynard, Charlotte, N. C.; Charles E. Varn, 307 Elmwood Dr., Greensboro, N. C.

SOMERVILLE-SEYBOLD DIVISION of HENLEY PAPER CO., 700 Murphy Ave., S.W., Atlanta, Ga.

SONOCO PRODUCTS CO., Hartsville, S. C.

SOUTHEASTERN SOUND & ELECTRONICS CORP., 2 Aberdeen Dr., Greenville, S. C.

SOUTHERN ELECTRIC SERVICE CO., Charlotte, Greensboro, N. C.; Greenville, Spartanburg, S. C.

SOUTHERN EQUIPMENT SALES CO., (N. C. **Equipment** Co.), Charlotte, N. C.

SOUTHERN SHUTTLES DIVISION, Steel Heddle Mfg. Co., Main Office and Plant, 2100 W. Allegheny Ave., Philadelphia, Pa. Greensboro Office, Guilford Bank Bldg., Box 1917, Greensboro, N. C., C. W. Cain, Mgr.; Henry P. Goodwin, Sales and Service. Greenville Office and Plant, 621 E. McBee Ave., Box 1899, Greenville, S. C., J. J. Kaufmann, Jr., V.-Pres. and Mgr. of Southern Divisions. Davis L. Batson and Sam Zimmermann, Jr., Sales and Service. Atlanta Office and Plant, 268 McDonough Blvd., Box 1496, Atlanta, Ga.; Southern Shuttles, a division of Steel Heddle Mfg. Co., 621 E. McBee Ave., Greenville, S. C., J. J. Kaufmann, Jr., Mgr.

SOUTHERN SPINDLE & FLYER CO., Charlotte, N. C.

STAHMER WOODEN SOLED SHOE CO., Davenport, Iowa.

STALEY MFG. CO., A. E., Decatur, Ill. Sou. Offices, 2000 Rhodes-Haverty Bldg., Atlanta, Ga. Wm. H. Randolph, Jr., Southeastern Mgr.; W. N. Dulaney, Asst. Southeastern Mgr. Sou. Reprs.: L. A. Dillon, 815 Third St., Durham, N. C.; H. A. Mitchell, Montgomery Bldg., Spartanburg, S. C.; W. T. O'Steen, Rt. 5, Greenville, S. C.; Walter P. Hope, 1160 Tate Drive, Columbus, Ga.

STANDARD MILL SUPPLY, INC., 2319 Hutchinson Ave., Charlotte, N. C. A. Benson Davis, V.-Pres. Repr.: J. Kenneth Sumner.

STANLEY WORKS, THE, New Britain, Conn. Sales Reprs.: G. H. Little, Harrison Bldg., Room 414, 4 S. 15th St., Philadelphia, Pa., Tel. Rittenhouse 9977; G. R. Douglas, 707 Columbian Mutual Towers, Memphis 3, Tenn., Tel. 8-7117; M. A. Hawkins, 3803 General Taylor St., New Orleans 15, La., Tel. Magnolia 5353; H. C. Jones, care The Stanley Sales Co., 410 Candler Bldg., Atlanta, Ga., Tel. Lamar 4651; G. J. McLernon, 209 Hubbard St., San Antonio 2, Tex., Tel. Travis 3653; Charles J. Turpie, Jr., 1412 Scott Ave., Charlotte, N. C., Tel. 3-7015; J. A. Dickson, P. O. Box 390, 112 Bales Ave., Phone 9-2812, Chattanooga, Tenn.; T. P. West, Jr., 10 Seminole, Dr., Greenville, S. C., Tel. 3-5932.

STEEL HEDDLE MFG. CO., Main Office and Plant, 2100 W. Allegheny Ave., Philadelphia, Pa. Greensboro Office, Guilford Bank Bldg., Box 1917, Greensboro, N. C., C. W. Cain, Mgr.; Henry P. Goodwin, Sales and Service, Greenville Office and Plant, 621 E. McBee Ave., Box 1899, Greenville, S. C., J. J. Kaufmann, Jr., V.-Pres. and Mgr. of Southern Divisions; Davis L. Batson and Sam Zimmermann, Jr., Sales and Service. Atlanta Office and Plant, 268 McDonough Blvd., Box 1496, Atlanta, Ga.; Southern Shuttles, a division of Steel Heddle Mfg. Co., 621 E. McBee Ave., Greenville, S. C., J. J. Kaufmann, Jr., Mgr.

STEIN, HALL & CO., INC., 285 Madison Ave., New York N. Y. Charlotte Office: 1620 W. Morehead St., Charlotte, N. C., F. W. Perry, Mgr., P.O. Box 809; N. C., Va. and Tenn. Repr.: W. S. Gilbert, Charlotte, N. C.; S. C. Repr.: Crawford H. Garren, P. O. Box 303, Pendleton, S. C.; Atlanta Office: 80 W. Peachtree Place, N. W., Atlanta, Ga., E. D. Estes, Mgr., 1257 Durand Drive, N. W.; Ala. Repr.: J. E. Myrick, 302 24th St., Tuscaloosa, Ala.; Ga. Repr.: Rodney Simpson, 80 W. Peachtree Pl. N. W., Atlanta, Ga.

STERLING RING TRAVELER CO., 101 Lindsay St., Fall River, Mass. Sou. Reprs.: M. H. Cranford, 135 Walnut St., Chester, S. C.; D. R. Ivestor, Clarkesville, Ga.; T. B. Farmer, Box 150, Langley, S. C.

STODGHILL & CO., Atlanta, Ga.

TERRELL MACHINE CO., THE, Charlotte, N. C. E. A. Terrell, Pres., W. S. Terrell, Sales Mgr.

TEXAS CO., THE, New York, N. Y. Dist. Offices, Box 901, Norfolk, Va., and Box 1722, Atlanta, Ga. Bulk Plants and Warehouses in all principal cities. Lubrication Engineers: P. C. Bogart, Norfolk, Va.; W. H. Goebel, Roanoke, Va.; F. M. Edwards, Raleigh, N. C.; W. P. Warner, Greensboro, N. C.; C. W. Meadors, Charlotte, N. C.; J. S. Leonard, Greenville, S. C.; F. G. Mitchell, Columbia, S. C.; L. C. Mitchum, Atlanta, Ga.; A. C. Keiser, Jr., Birmingham, Ala.; J. E. Buchanan, Munsey Bldg., Baltimore, Md.; G. W. Wood, Charlotte, N. C.; J. H. Murfee, Greensboro, N. C.; G. B. Maupin, Greensboro, N. C.; W. T. Allen, Greensboro, N. C.; C. T. Hardy, Durham, N. C.; J. G. Loudermilk, Atlanta, Ga.; A. C. Evans, Macon, Ga.; J. S. Sammons, Birmingham, Ala.; J. M. Malone, Montgomery, Ala.; H. E. Meunter, Charlotte, N. C.; C. B. Fischer, Goldsboro, N. C.

TEXTILE APRON CO., East Point, Ga.

TEXTILE LABORATORIES, Box 1396, Gastonia, N. C.

TEXTILE SHOPS, THE, Spartanburg, S. C. **E. J. Eaddy.**

THORNBURG MACHINE WORKS, INC., P. O. Box 186, Dallas, N. C. C. O. Thornburg and F. B. McDonald.

TIDE WATER ASSOCIATED OIL CO., 17 Battery Place, New York, N. Y. S. E. District Office, 3119 S. Blvd., Charlotte 3, N. C., K. M. Slocum, Dist.

Mgr., Tel. Charlotte 2-3063. Sales Reprs.: L. A. Watts, Jr., 407 N. Allen Ave., Richmond, Va. Tel. Richmond 4-8944; W. R. Harper, 1806 Madison Ave., Greensboro, N. C., Tel. Greensboro 8784; L. G. Compton, Jr., No. 1 Robinson St., Elizabeth Apts, Greenville, S. C.; Tel. Greenville 2-9222.

TOWER IRON WORKS, 50 Borden St., Providence 3, R. I. Sou. Reprs.: Ira L. Griffin & Sons, Charlotte 1, N. C., Tel. Charlotte 4-8306.

U S BOBBIN & SHUTTLE CO., Lawrence, Mass. Sou. Offices: Charlotte, N. C.; Greenville, S. C.; Johnson City, Tenn. Texas Repr.: O. T. Daniel, Textile Supply Co., Dallas, Tex.

U. S. RING TRAVELER CO., 159 Aborn St., Providence, R. I. Sou. Office and Sales Room: 1903 Augusta Rd., Greenville, S. C. Sou. Reprs.: William P. Vaughan and Wm. H. Rose, P. O. Box 1048, Greenville, S. C.; Oliver B. Land, P. O. Box 1187, Athens, Ga.; Harold R. Fisher, P. O. Box 83, Concord, N. C.

UNITED STATES TESTING CO., INC., 1415 Park Ave., Hoboken, N. J. Sou. Branches: United States Testing Co., Inc., 198 S. Main St., Memphis, Tenn., Tel. Memphis 38-1246, manager S. C. Mayne; 1700 Cotton Exchange Bldg., Dallas, Tex., Tel. Prosp. 2654.

UNIVERSAL WINDING CO., P. O. Box 1605, Providence, R. I. Sou. Offices, 819 Johnston Bldg., Charlotte, N. C.; Agts.; R. M. Mauldin and D. M. Dunlap; 903 Whitehead Bldg., Atlanta, Ga., Agt. J. W. Stribling.

USTER CORP., Main Office, Charlotte, N. C.; 80 Boylston St., Boston 16, Mass.

VALENTINE CO., J. W., 612 S. Main St., Winston-Salem, N. C.; Box 278 Salem Station, Winston-Salem, N. C. T. Holt Haywood, Wachovia Bank & Trust Co. Bldg., Winston-Salem, N. C.

VEEDER-ROOT, INC., Hartford, Conn. Sou. Office, Room 231 W. Washington St., Greenville, S. C., Frank J. Swords, Sou. Dist. Mgr.

VICTOR RING TRAVELER CO., Providence, R. I., with Sou. Office and Sales Room at 358-364 W Main Ave., P. O. Box 842, Gastonia, N. C. Phone 247. Also W. L. Hudson, Box 1313, Columbus, Ga.

WARWICK CHEMICAL CO., DIV. SUN CHEMICAL CORP. Main Office: 1010 44th Ave., Long Island City, N. Y. Sou. Plant: 907 White St., Rock Hill, S. C., J. D. Snipes, Mgr. Sou. Reprs.: M. M. McCann, Box 825, Burlington, N. C.; Minor Hunter, 1136 Skyland Rd., Charlotte, N. C.; H. Papini, E. R. Adair, Box 1207, Greenville, S. C.; W. E. Searcy, 425 Tilney Ave., Griffin, Ga.

WATSON & DESMOND, 301½ W. Fourth St., Charlotte 1, N. C. Repr.: John Wyatt, Jefferson Standard Bldg., Greensboro, N. C.; R. V. McPhail, 709 S. Jackson St., Gastonia, N. C.; A. J. Bahan, Woodside Bldg., Greenville, S. C., Edgar E. Ball, (Chemical Dept.) Charlotte, N. C.

WATSON & HART, 1001 E. Bessemer Ave., Goldsboro, N. C.

WATSON-WILLIAMS MFG. CO., Millbury, Mass. Sou. Reprs.: John Wyatt, 703 Jefferson Bldg., Greensboro, N. C.; Arthur J. Bahan, 810 Woodside Bldg., Greenville, S. C.

WEST POINT FOUNDRY & MACHINE CO., West Point, Ga.

WESTPORT FIBRE CORP., Westport, Mass., Va. and N. C. Repr.: Oliver D. Landis, Inc., 718 Queens Rd., Charlotte 7, N. C.; Ga., Ala. and Tenn. Repr.: J. W. Davis, 122 Dillingham St., Columbus, Ga.; S. C. Repr.: Ralph Gossett, 15 Augusta St., Greenville, S. C.

WHITEHEAD ENGINEERING CO., Atlanta, Ga.

WHITIN MACHINE WORKS, Whitinsville, Mass. Sou. Office, Whitin Machine Works Office and Plant, Dowd Road, Charlotte, N. C., R. I. Dalton, V.-Pres. and Sou. Agt.; Charlotte Repair Shop, Z. C. Childers, Sales Mgr.; Atlanta, Ga., Office, 1015 Healey Bldg., B. B. Peacock, Sou. Agt.; Spartanburg, S. C., 724 Montgomery Bldg., R. W. Dunn, Sou. Agt.

WHITINSVILLE SPINNING RING CO., Whitinsville, Mass. Sou. Repr.: William K. Shirley, 11 Wyuka St., Greenville, S. C.

WILKIN & MATTHEWS, 831 N. Tryon St., Charlotte, 3, N. C. Hugh Wilkin and John Matthews.

WILSON CO., EMIL V., Greenville, S. C.

WOLF, JACQUES & CO., Passaic, N. J. Sou. Reprs.: C. R. Bruning, 302 N. Ridgeway Dr., Greensboro, N. C.; G. W. Searell, Rt. 15, Knoxville, Tenn.

Before Closing Down

—TEXTILE INDUSTRY HAPPENINGS AS THE MONTH ENDED—

PERSONAL NEWS

Henry C. Benkert, formerly traffic rate expert of the U. S. Rubber Co. plants at Hogansville, Ga., recently became traffic manager at Winnsboro (S. C.) Mills succeeding W. R. Lamb who was transferred to Hogansville.

John B. Coxe has rejoined Sonoco Products Co., Hartsville, S. C., as assistant to the vice-president in charge of sales, a new position in the company. Mr. Coxe, who formerly was Sonoco's representative in North Carolina, has been a consultant with the paper converting division of the National Production Authority in Washington since last December.

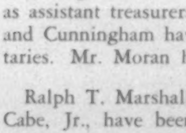
James C. Self, president of Greenwood (S. C.) Mills, was honored April 8 when he was presented the first annual Greenwood Rotary Club Community Service Award, a plaque given "in grateful recognition of his outstanding service to the community of Greenwood."

Walter S. Vanderbilt of New York has been named president and a director of Southern Worsted Mills, Greenville, S. C., succeeding J. W. Newkirk, who resigned because of ill health. . . . Horace D. Wood of Boston, Mass., has been named a director of the firm to fill the vacancy caused by the death of Lawrence E. Green.

Charles R. Catlin, Edward J. Cunningham, Thomas J. Lea, John P. Maguire, Jr., and Louis J. Moran have been made vice-presidents of John P. Maguire & Co., factoring firm of New York City, and Lester Prink has been named secretary. Messrs. Lea, Maguire and Prink have been serving as assistant treasurers, while Messrs. Catlin and Cunningham have been assistant secretaries. Mr. Moran has been secretary.

Ralph T. Marshall and W. Gordon McCabe, Jr., have been made vice-presidents of J. P. Stevens & Co., Inc. Mr. Marshall, who served as president of Utica & Mohawk Cotton Mills prior to its acquisition by Stevens in January, is in charge of manufacturing operations at the two plants of the Utica & Mohawk division at Clemson and Seneca, S. C. Mr. McCabe joined Stevens in 1948 and supervises purchases of cotton and wool.

S. E. Murdock of Rutherfordton, N. C., is now superintendent of Chesnee (S. C.) Mills, a subsidiary of Reeves Bros., Inc. . . . John M. Snoddy of Marion, N. C., is now assistant superintendent at Chesnee.



Walter G. Regnery *(left)*, president and general manager of Joanna (S. C.) Cotton Mill Co., has been appointed a collaborator of the cotton mechanical processing division, Southern Regional Research Laboratory, to advise on the planning and execution of its research program. The laboratory is a unit of the Bureau of Agricultural and Industrial Chemistry, U. S. Department of Agriculture, in New Orleans, La. . . . Others serving as advisers at the present time are Norman E. Elsas of Fulton Bag & Cotton Mills, Atlanta, Ga.; M. Earl Heard of West Point (Ga) Mfg. Co.; and W. Alex Turner of Avondale Mills, Sylacauga, Ala.

Louis W. Bishop, for the past year and a half president of Hunt Machine Works, Greenville, S. C., has resigned from that post to return to his former position as director of the South Carolina Research, Planning and Development Board.

John W. Arrington, Jr., vice-president and assistant treasurer of Union Bleachery, Greenville, S. C., has been elected an executive committeeman to the State Democratic Convention from Greenville County.

William T. Harris, who has been employed by York (Pa.) Corp. since 1936, has been named assistant to the district commercial sales manager of the air conditioning and refrigeration firm's Southern district headquarters at Atlanta, Ga. Mr. Harris succeeds A. H. Johnston who resigned recently to become affiliated with Pittman-Singleton, Inc., York Corp. distributor in Fayetteville, N. C.

Frank L. Carter, secretary of the Cotton Manufacturers Association of Georgia, has been elected secretary-treasurer of the Atlanta (Ga.) Rotary Club.

Herbert G. Scull, formerly head of the dyeing and finishing laboratory of A. M. Tenney Associates in New York City, has joined Dan River Mills, Danville, Va. He has been succeeded at Tenney by George W. Wernz.

Floyd C. Newton, Jr., has been elected treasurer of Dundee Mills, Inc., Griffin, Ga. E. C. Hulsey, secretary since 1950, assumes the added duties of office manager. John Cheatham, Jr., has been named assistant to J. M. Cheatham, president.

Lewis C. Briggs, III, has been appointed sales manager of U S Bobbin & Shuttle Co., Lawrence, Mass. U S Bobbin & Shuttle Co. operates plants at Lawrence and at Greenville, S. C., Johnson City, Tenn., Tupper Lake, N. Y., and Enosburg Falls, Vt. Sales offices are maintained in the South at Greenville, Johnson City and at Charlotte, N. C.

Harold E. Emrich has been named credit manager of Joshua L. Baily & Co., Inc., New York, succeeding the late Anthony J. Pischel. Mr. Emrich has been associated with the firm since 1932.

Morse G. Dial has been elected president of Union Carbide & Carbon Corp. succeeding Fred H. Haggerson, who will continue as chairman of the board. Mr. Dial, who has been with the organization since 1929, became executive vice-president of the firm in 1951.

Charles M. Shaffer, assistant manager of the purchasing department at Burlington Mills Corp., Greensboro, N. C., has been appointed assistant to the chancellor in development at the University of North Carolina. He will help develop the foundation's program at the university and will work with the university's paid staff, alumni, friends and benefactors.

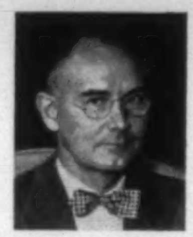
William J. Vereen, president of Moultrie (Ga.) Cotton Mills, is now at his home recovering from a recent operation at Emory University Hospital, Atlanta. Mr. Vereen's condition is said to be very much improved.

D. R. LaFar, Jr., of Gastonia, N. C., head of the LaFar chain of textile plants in the Carolinas, recently was named as a member of the executive committee of Region Six, Boy Scouts of America. Region Six includes Boy Scout councils of North Carolina, South Carolina, Georgia and Florida.

Walter Glenn, formerly superintendent of Mayfair Cotton Mills, Arcadia, S. C., has been named superintendent of Camperdown Co., Inc., Greenville, S. C., succeeding John H. Huff, who retired recently after serving for 34 years as superintendent at Camperdown.

William J. Brooks has been promoted to assistant superintendent of the dye plant of Callaway Mills Co., LaGrange, Ga. Prior to his promotion he was assistant to the vice-president and general manager of the firm's HDV division. Mr. Brooks is a graduate of North Carolina State College School of Textiles. . . . William P. Squires has been promoted to second hand in the weave room at Callaway's Manchester, Ga., plant. Before joining Callaway, Mr. Squires was for 17 years associated with Moultrie (Ga.) Cotton Mills.

Mrs. Mildred B. Andrews has resigned from her position on the staff of Textile Mills Information Service, Washington, D. C. Mrs. Andrews is a former executive secretary of the Southern Combed Yarn Spinners Association.



J. Ebert Butterworth *(left)* has been elected president of H. W. Butterworth & Sons Co., Bethayres, Pa., succeeding Harry W. Butterworth, Jr., who became chairman of the board. Mr. Butterworth has been vice-president and secretary of the firm and has handled export sales. With J. Hillman Zahn he opened the company's Southern office in 1923 and was its representative there from 1923 to 1930. He was in the home office from 1930 to 1941 when he returned to the Army with the rank of colonel. A graduate of Princeton in the class of 1916, he served as an infantry officer in World War I.

OBITUARIES

W. Howard Ector, for 28 years cashier for Lanett Bleachery & Dye Works, died recently at West Point, Ga. Survivors include his widow, three sons, a daughter, three brothers and three sisters.

Leon L. McGrady, 58, manager of Eastman Kodak Co.'s cellulose products sales division, died April 4 after a brief illness. Before joining Eastman in 1930, Mr. McGrady's prior associations included Massasoit Mfg. Co., Fall River, Mass., Meridian Fibre Co., and F. Burkhart Mfg. Co., Philadelphia.

Wade P. Stowe, 60, superintendent of Crescent Spinning Co., Belmont, N. C., died April 13 at his home in Belmont after a long illness. Surviving are four sons, two daughters, two brothers and five sisters.

Frank M. Wooten, Jr., 46, head of F. M. Wooten Cotton Co., Camden, S. C., and for many years a representative for Kendall Mills, died April 17 following a heart attack. Surviving are his wife, three children, four brothers and three sisters.

MILL NEWS

ELIJAY, GA.—Plans have been announced by Peerless Textiles, Inc., a Tennessee manufacturer of woolen cloth, for construction of four identical plant buildings here, each to cost $1,000,000. Construction will begin when materials become available.

FALL RIVER, MASS. — American Thread Co. announced last month that all operations at its Kerr Mills division here would be transferred to the new plant at Sevier, N. C., by late 1953. Changing competitive conditions were cited by the company as the reason for the move, which will begin in June. The plant will be shut down and the buildings offered for sale when the transfer is completed.

KINSTON, N. C. — Construction of the $40,000,000 Dacron plant of E. I. du Pont de Nemours & Co. was delayed 12 days, from March 28 to April 9 by a strike of A.F.L. construction workers. The plant is scheduled for completion in 1953.

COVINGTON, VA.—The Covington plant of Industrial Rayon Corp. has earned a first place award from the National Safety Council for an outstanding record of safety during 1951. The rayon plant led all other entrants in its division of the textile section. The plant completed 1951 with a frequency rate of only 1.36 lost-time accidents for each million man-hours worked.

MARTINSVILLE, VA.—Fontaine Converting Works has received the first finisher license for the use of Avcoset, the new American Viscose Corp. process for shrinkage and wear control. Julius Hermes, Fontaine manager, recently signed the papers in New York City.

BISHOPVILLE, S. C.—Reeves Bros.' synthetics finishing plant will have its formal opening here sometime in June. Installation of machinery and furnishings has been completed. At present, about 50 are employed in the sampling department, an executive of the company said. William Shine is plant superintendent, Carry Kilgore, a local man, personnel director, and Andrew E. Collins, formerly of Paterson, N. J., manager.

ATCO, GA.—The Atco plant of Goodyear Mills has been presented a Treasury Department citation for making the best record of any company or institution in the State of Georgia in 1951 in participation in the U. S. Savings Bonds Plan. Seven and one-half per cent of the entire Atco plant payroll in 1951 went into the purchase of bonds. Ninety-three per cent of the company's personnel complement at Atco participated in the plan during the year, putting a total of over $250,000 into bonds. Winning the citation made the Atco plant eligible to fly the Treasury Department pennant awarded to companies with high records in the bond plan. Joseph G. Woodruff, state director of the Georgia U. S. Savings Bonds Division, presented the citation and G. L. Parmenter, superintendent of the Atco plant, accepted it on behalf of the company and employees.

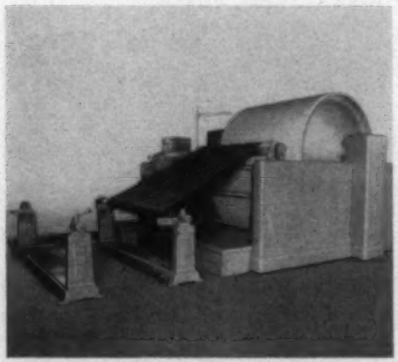
100th Anniversary

C. G. Sargent's Sons Corp. of Graniteville, Mass., textile machinery manufacturer, is celebrating its 100th anniversary this year. The business was established in June, 1852 by Charles G. Sargent who designed and built the first American wool washer, automatic burr picker, and other machines.

As the business progressed through the years, the company attained world-wide recognition as designers and builders of textile preparatory machinery for every operation up to spinning and weaving. Becoming America's largest manufacturers of wool washing and stock-drying equipment, the company designed and completely equipped its own modern research laboratory for the solution of drying problems in the textile industry. For more than a decade, the laboratory has also been serving other industries such as rubber and food; and has branched into paper, paint, plastics, powder, etc., designing and building drying equipment for these industries.

In 1897 the company name became Charles G. Sargent & Son. Five years later another son entered the business and it was named Charles G. Sargent & Sons. Incorporated in 1904 as C. G. Sargent's Sons Corp., the company has its roots firmly in New England and maintains its honored place in industry by constant research and completely modern outlook and methods.

Gessner Versamatic Machine



The David Gessner Co. announces a new 60-inch Versamatic semi- decating machine. This machine has been engineered with the same features made famous by the 36-inch Versamatic semi-decating machine which was introduced at the 1950 show in Atlantic City. The 60-inch machine has been in mill operation for some time.

The main feature of the 60-inch Versamatic is the quantity of material that can be processed uniformly at a single loading. Full sets of woolen and worsteds and thousand yard rolls of synthetics are successfully handled. The machine has been designed to take cloth from either a roll or fold and to deliver the cloth in either a roll or a fold. Uniformity of finish is assured by automatic apron tension control and controlled pressure roll, combined with Gessner's automatic cycle control for both steaming and cooling.

Another feature of the machine is the automatic apron guide. This device keeps the apron dressed evenly to one side at all times and is completely automatic. The infinitely variable speed hydraulic drive assures smooth running operation in both directions with finger-tip control. This unique drive is designed to keep the correct tension on the apron even when running at high speeds.

The design of the Gessner steaming cylinder precludes wetting the apron. Rapid cooling at low horsepower is another feature of the machine. The machine will operate at extremely high speeds or extra low speeds because of the versatility of this hydraulic drive, the firm states.

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